

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF SOUTH CAROLINA**

STERLING MISANIN, et al.,

*Plaintiffs,*

v.

ALAN WILSON, in his official capacity as  
the Attorney General of South Carolina, et  
al.,

*Defendants.*

Case No.: \_\_\_\_\_

**EXPERT DECLARATION OF  
ARMAND H. MATHENY AN TOMM MARIA, MD, PhD, FAAP, HEC-C**

**INTRODUCTION**

I, Armand H. Matheny Antommarmia, hereby state as follows:

1. I have been retained by counsel for Plaintiffs as an expert in connection with the above-captioned litigation. I am over 18 years old, of sound mind, and in all respects competent to testify.

2. I have actual knowledge of the matters stated herein.

3. In preparing this declaration, I reviewed South Carolina House Bill 4624 (“H 2624”). In addition to this legislation and the materials cited herein, I have also relied on my years of research and other experience, as set out in my curriculum vitae (CV) (Exhibit A), in forming my opinions. The materials I have relied upon in preparing this declaration are the same types of materials that experts in my fields of study regularly rely upon when forming opinions on subjects. I may wish to supplement these opinions or the bases for them as a result of new scientific research or publications or in response to statements and issues that may arise in my areas of expertise.

## OVERVIEW

4. I am a pediatrician and bioethicist with extensive clinical and research experience. I am the author of 43 peer-reviewed articles, which have been published in high-impact journals including the *Journal of the American Medical Association* and *Annals of Internal Medicine*, and I direct the Ethics Center at Cincinnati Children's Hospital Medical Center. I have reviewed H 4624 and submit this declaration to explain my disagreement with and concerns about its conclusions.

5. H 4624, among other restrictions, prohibits physicians from “knowingly provid[ing] gender transition procedures to a person under eighteen years of age,” S.C. Code § 44-42-320(A) with a provision requiring ongoing treatment with puberty-blocking drugs or cross-sex hormones be discontinued prior to January 1, 2026. “Gender transition procedures” are defined as “puberty-blocking drugs, cross-sex hormones, or genital or nongenital gender reassignment surgery, provided or performed for the purpose of assisting an individual with a physical gender transition.” S.C. Code § 44-42-310. I will refer to puberty-blocking drugs as gonadotropin releasing hormone (GnRH) analogs, cross-sex hormones as sex hormones or as gender-affirming hormones, these treatments collectively as gender-affirming medical care, and the individuals to whom they are prescribed as minors or adolescents. H 4624 prohibits physicians from providing this care under the threat of professional administrative and civil penalties, and enforcement by the Attorney General. I will refer to these provisions of H 4624 as “the Healthcare Ban” or simply “the Ban.”

6. There is no sound medical or ethical basis for the Ban. Gender-affirming medical care is evidence-based and the evidence for it is comparable to the evidence for many other treatments in pediatrics. The potential benefits and risks of gender-affirming medical care are comparable to those of other forms of medical treatment—treatment for which parents or legal

guardians are capable of providing informed consent and minor adolescents are capable of providing assent. Recent decisions in several Northern European countries do not support the Ban.

7. As a result, the Ban puts clinicians in the untenable position of either following state law and violating their ethical duties to promote their patients' well-being and protect them from harm or facing professional administrative and civil penalties. Either outcome results in harm to patients.

8. H 4624 also provides that "Public funds may not be used directly or indirectly for gender transition procedures." S.C. Code § 44-42-340. This provision applies to gender transition procedures for all individuals, regardless of age. I will refer to this portion of H 4624 as "the Funding Restriction."

9. Finally, H 4624 further provides that "The South Carolina Medicaid Program shall not reimburse or provide coverage for practices prohibited under the provisions of this chapter." S.C. § 44-42-350. This provision applies to gender transition procedures for all individuals, regardless of age. I will refer to this portion of H 4624 as "the Medicaid Restriction."

10. There is no sound medical or ethical basis for singling out gender-affirming medical care for exclusion via the Funding Restriction or the Medicaid Restriction. Treatment of gender dysphoria is not experimental, is supported by evidence of safety and efficacy, and is consistent with generally accepted professional medical standards. As a result, the Funding Restriction and Medicaid Restriction exclude such care from coverage in a manner inconsistent with other medical coverage decisions.

## **BACKGROUND AND QUALIFICATIONS**

11. I am the Director of the Ethics Center, the Lee Ault Carter Chair of Pediatric Ethics, and an Attending Physician in the Division of Hospital Medicine at Cincinnati Children's Hospital

Medical Center (“Cincinnati Children’s”). I am also a Professor in the Departments of Pediatrics and Surgery at the University of Cincinnati College of Medicine.

12. I received my medical degree from Washington University School of Medicine in St. Louis, Missouri in 2000. I received my PhD in Religious Ethics from The University of Chicago Divinity School in 2000. I completed my pediatrics residency at the University of Utah in 2003.

13. I have been licensed to practice medicine since 2001 and am currently licensed to practice medicine in Ohio. I have been Board Certified in General Pediatrics since 2004 and in Pediatric Hospital Medicine since the inception of this certification in 2019. I have been certified as a Healthcare Ethics Consultant since the inception of this certification in 2019.

14. I have extensive experience as a pediatrician and as a bioethicist. I have been in clinical practice since 2003 and 30% of my current effort is dedicated to caring for hospitalized patients. I was Chair of the Ethics Committee at Primary Children’s Medical Center in Salt Lake City, Utah from 2005 to 2012 and have been Director of the Ethics Center at Cincinnati Children’s since 2012. I regularly consult on the care of patients in the Transgender Health Clinic at Cincinnati Children’s and participate in the Clinic’s monthly multidisciplinary team meetings. I remain current with the medical and bioethics literature regarding the treatment of individuals with gender dysphoria, particularly minors. I am also part of Cincinnati Children’s team that cares for patients born with differences or disorders of sex development (DSD), also known as intersex traits. I chair Cincinnati Children’s Fetal Care Center’s Oversight Committee, which provides the Center recommendations on the use of innovative treatments and experimental interventions.

15. As an academic pediatric hospitalist, I practice and teach evidence-based medicine, including the development and use of clinical practice guidelines. As a bioethicist, I help patients, parents, and healthcare providers address ethical dilemmas and resolve ethical conflicts. This

involves analyzing the evidence and reasons supporting different treatment options. I also assist my institution to develop ethically sound policies and procedures.

16. I am a member of the American Academy of Pediatrics (AAP), the American Society for Bioethics and Humanities (ASBH), the Association of Bioethics Program Directors, and the Society for Pediatric Research. I was a member of the AAP Committee on Bioethics from 2005 to 2011. I have also served as a member of ASBH's Clinical Ethics Consultation Affairs Committee from 2009 to 2014 and recently completed my service on its Healthcare Ethics Consultant Certification Commission.

17. I am the author of 43 peer-reviewed journal articles, 11 non-peer-reviewed journal articles, 6 book chapters, and 28 commentaries. My peer-reviewed journal articles have been published in high-impact journals, including the *Journal of the American Medical Association* and *Annals of Internal Medicine*. I am also an author of 17 policy statements and technical reports, including 4 as lead author, by the AAP.

18. I am a member of *Pediatrics*' Executive Editorial Board and its Associate Editor for Ethics Rounds. I am an active peer reviewer for many medical journals, including the *American Journal of Bioethics* and the *Journal of Pediatrics*. I am chair of the National Library of Medicine's Literature Selection Technical Review Committee. I also review abstracts for meetings of professional organizations, including the Pediatric Academic Societies and ASBH. I was previously a member of the editorial boards of the *Journal of Clinical Ethics* and the *Journal of Medical Humanities*.

19. I have previously testified at deposition and/or in court in *Boe et al. v. Marshall et al.*, United States District Court, Middle District of Alabama, Case No. 22-cv-00184; *Brandt et al. v. Griffin et al.*, United States District Court, Eastern District of Arkansas, Case No. 4:21-CV-

00450; *Dekker et al. v. Weida et al.*, United States District Court, Northern District of Florida, Case No. 4:22-cv-00325; *Doe et al. v. Abbott et al.*, District Court of Travis County, Texas, Case No. D-1-GN-22-000977; *Moe v. Yost*, Franklin County Court of Common Pleas, Ohio, Case No. 24CVH03-2481; *Noe et al. v. Parson et al.*, Circuit Court of Cole County, Missouri, Case No. 23AC-CC04530; and *Zayre-Brown v. North Carolina Department of Public Safety et al.*, United States District Court, Western District of North Carolina, Case No. 3:22-CV-01910. The cases in which I have authored reports but have not testified are listed in my CV (Exhibit A). I am being compensated at a rate of \$400 per hour for preparation of expert declarations and reports, and a flat fee of \$3,200 per day for deposition or trial testimony. My compensation does not depend on the outcome of this litigation, the opinions I express, or the testimony I provide.

## **THE TREATMENT OF GENDER DYSPHORIA IS SUPPORTED BY EVIDENCE COMPARABLE TO THE EVIDENCE FOR MANY OTHER MEDICAL TREATMENTS**

### **Clinical Practice Guidelines**

20. Medical professional organizations develop clinical practice guidelines to provide clinicians with helpful, evidence-based recommendations and improve patient care and outcomes. Clinical practice guidelines are developed using systematic processes to select and review scientific evidence. Guidelines typically rate the quality of the evidence and grade the strength of recommendations.<sup>1</sup> One widely used method of grading the quality of the evidence and the

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<sup>1</sup> American Academy of Pediatrics Steering Committee on Quality Improvement and Management. Classifying recommendations for clinical practice guidelines. *Pediatrics*. 2004;114(3):874-877.

strength of recommendations is the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) system.<sup>2</sup>

21. GRADE states, “In the context of making recommendations, the quality ratings reflect the extent of our confidence that the estimates of an effect are adequate to support a particular decision or recommendation.”<sup>3</sup> The GRADE system is more nuanced than the Levels of Evidence Pyramid. In addition to study design, GRADE characterizes the quality of evidence based on risk of bias, consistency, and directness. GRADE distinguishes four levels of evidence: “high,” “moderate,” “low,” and “very-low.” These levels are relative to one another and “low” does not necessarily mean poor or inadequate. As discussed below, a recommendation in a clinical practice guideline may be based on “low” or “very low” quality evidence, not just “high” or “moderate” quality evidence.<sup>4</sup>

22. With respect to study design, randomized controlled trials generally provide “high” quality evidence.<sup>5</sup> In a randomized controlled trial, participants are randomly assigned to a treatment or a comparison group. The major benefit of a randomized trial is that it decreases the

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<sup>2</sup> Atkins D, Best D, Briss PA, et al. Grading quality of evidence and strength of recommendations. *BMJ*. 2004;328(7454):1490.

<sup>3</sup> Balshem H, Helfand M, Schünemann HJ, et al. GRADE guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol*. 2011;64(4):403.

<sup>4</sup> Balshem H, Helfand M, Schünemann HJ, et al. GRADE guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol*. 2011;64(4):401-406.

<sup>5</sup> Balshem H, Helfand M, Schünemann HJ, et al. GRADE guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol*. 2011;64(4):401-406.

likelihood that any differences in the outcomes between the groups is the result of baseline differences between the groups rather than the result of the intervention.<sup>6</sup>

23. By comparison, observational studies generally constitute “low” quality evidence.<sup>7</sup> Observational studies include cross-sectional and longitudinal studies. In cross-sectional studies, investigators collect data at a single point in time. A cross-sectional design permits investigators to examine potential associations between factors, but it cannot prove one factor caused the other. An example of a cross-sectional study related to gender-affirming medical care is Jack L. Turban and colleagues’ analysis of data from the 2015 United States (US) Transgender Survey. The survey asked transgender adults, who were recruited through community outreach, about their demographics, past gender-affirming medical care, family support, and mental health outcomes. The investigators found that those who received pubertal suppression had lower odds of lifetime suicidal ideation compared to those who wanted treatment with pubertal suppression but did not receive it.<sup>8</sup> In longitudinal studies, researchers follow individuals over time, making continuous or

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<sup>6</sup> Browner WS, Newman TB, Cummings SR, et al. *Designing Clinical Research*. 5th ed. Wolters Kluwer; 2022.

<sup>7</sup> Balshem H, Helfand M, Schünemann HJ, et al. GRADE guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol*. 2011;64(4):401-406.

<sup>8</sup> Turban JL, King D, Carswell JM, Keuroghlian AS. Pubertal suppression for transgender youth and risk of suicidal ideation. *Pediatrics*. 2020;145(2):e20191725.



repeated measures.<sup>9</sup> Examples of longitudinal studies include the studies of the associations between gender-affirming medical care and psychological outcomes discussed below.<sup>10</sup>

24. While randomized trials generally provide “high” quality evidence and observational studies “low,” the quality of a study or group of studies may be moved up or down based on other considerations such as the risk of bias.<sup>11</sup>

25. The labels “high” and “low” quality evidence can be misleading if the latter is used in the colloquial sense of poor or inadequate. While randomized controlled trials are described in the medical literature as “high” quality evidence and observational studies as “low” quality evidence, randomized controlled trials may not be feasible or ethical, may have intrinsic methodological limitations, or may be unavailable in some contexts. “High” quality evidence is not required for a treatment to no longer be considered experimental. A particular quality of evidence as specified by the GRADE system does not necessarily entail a particular strength of recommendation; as described below, “low” quality evidence can be sufficient to justify “strong” recommendations.<sup>12</sup>

26. At times, it may be unethical to conduct randomized trials. For randomized trials to be ethical, clinical equipoise must exist; there must be uncertainty about whether the efficacy of

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<sup>9</sup> Browner WS, Newman TB, Cummings SR, et al. *Designing Clinical Research*. 5th ed. Wolters Kluwer; 2022.

<sup>10</sup> See, for example, de Vries AL, Steensma TD, Doreleijers TA, Cohen-Kettenis PT. Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *J Sex Med*. 2011;8(8):2276-2283.

<sup>11</sup> Balshem H, Helfand M, Schünemann HJ, et al. GRADE guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol*. 2011;64(4):401-406.

<sup>12</sup> Balshem H, Helfand M, Schünemann HJ, et al. GRADE guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol*. 2011;64(4):401-406; Swiglo BA, Murad MH, Schünemann HJ, et al. A case for clarity, consistency, and helpfulness: State-of-the-art clinical practice guidelines in endocrinology using the Grading of Recommendations Assessment, Development, and Evaluation system. *J Clin Endocrinol Metab*. 2008;93(3):666-673.

the intervention or the control is greater. Otherwise, it would be unethical to knowingly expose trial participants to an inferior intervention or control. Trials must also be feasible; it would also be unethical to expose individuals to the risks of trial participation without the benefit of the trial generating generalizable knowledge. A randomized trial that is unlikely to find enough people to participate because they believe they might be randomized to an inferior intervention would be unethical because it could not produce generalizable knowledge due to an inadequate sample size.<sup>13</sup>

27. Clinical research focusing on children is less likely to use randomized trials than is clinical research for adults. Potential reasons for this disparity include the low prevalence of childhood disease, small market share for therapeutic agents in children, low level of National Institutes of Health funding, and difficulty enrolling children in research.<sup>14</sup>

28. The process for assessing the quality of the evidence is separate and distinct from the process for grading the strength of recommendations based on this evidence.<sup>15</sup> When making recommendations, the authors of guidelines consider a variety of factors; the quality of the evidence is only one factor considered in making recommendations. Other considerations include the balance between desirable and undesirable outcomes, confidence and variability in patients' values and preferences, and resource use.<sup>16</sup> The GRADE system distinguishes "strong" and

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<sup>13</sup> Emanuel EJ, Wendler D, Grady C. What makes clinical research ethical? *JAMA*. 2000;283(20):2701-2711.

<sup>14</sup> Martinez-Castaldi C, Silverstein M, Baucher H. Child versus adult research: The gap in high quality study design. *Pediatrics*. 2008;122(1):52-57.

<sup>15</sup> Balshem H, Helfand M, Schünemann HJ, et al. GRADE guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol*. 2011;64(4):401-406.

<sup>16</sup> Andrews JC, Schünemann HJ, Oxman AD, et al. GRADE guidelines: 15. Going from evidence to recommendation-determinants of a recommendation's direction and strength. *J Clin Epidemiol*. 2013;66(7):726-735.

“weak” recommendations; if the authors are highly confident in the balance between desirable and undesirable consequences, they make a “strong” recommendation and, if they are less confident, a “weak” recommendation.<sup>17</sup> The larger the differences between the desirable and undesirable consequences and the smaller the variability in patient values and preferences, the more likely a “strong” recommendation is warranted. “Low” quality evidence may be sufficient to make a “strong” recommendation.<sup>18</sup>

29. Recommendations for pediatric care made by professional associations in clinical practice guidelines are seldom based on well-designed and conducted randomized controlled trials due to their rarity. Instead, recommendations are frequently based on observational studies or, if such studies are unavailable, expert opinion. The medical use of the term “expert opinion” in this context refers to the consensus of experts when studies are not available.

30. For example, of the 130 recommendations in the American Heart Association’s (AHA’s) guideline for Pediatric Basic and Advanced Life Support, only 1 (0.8%) is based on “high-quality evidence from more than 1 [randomized clinical trial]” and 3 (2.3%) on “moderate-quality evidence from 1 or more [randomized clinical trials].” The remainder of the recommendations were based on lower quality evidence. Among its 57 “strong” recommendations

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<sup>17</sup> Andrews J, Guyatt G, Oxman AD, et al. GRADE guidelines: 14. Going from evidence to recommendations: The significance and presentation of recommendations. *J Clin Epidemiol.* 2013;66(7):719-725.

<sup>18</sup> Andrews JC, Schünemann HJ, Oxman AD, et al. GRADE guidelines: 15. Going from evidence to recommendation-determinants of a recommendation’s direction and strength. *J Clin Epidemiol.* 2013;66(7):726-735.

(both Class 1 and Class 3 Harm), 48 (84%) are based on “limited data” or “expert opinion.”<sup>19</sup>

Table 1 (Exhibit B).

31. Clinicians cannot tell their patients to come back later after randomized controlled trials have been conducted. Clinicians must make decisions based on the best, currently available evidence, which may be observational studies or expert opinion. The lack of randomized controlled trials and reliance on “low” quality evidence does not mean that there is not reasonable support for a clinical practice guideline recommendation or that a treatment is not medically necessary.

### **Clinical Practice Guidelines for the Treatment of Adolescents with Gender Dysphoria**

32. Gender dysphoria is a medical diagnosis contained in the American Psychiatric Association’s (APA’s) *Diagnostic and Statistical Manual of Mental Disorders*. This diagnosis is defined by “a marked incongruence between one’s experienced/expressed gender and their assigned gender, lasting at least 6 months” which is “associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning.”<sup>20</sup>

33. Gender-affirming care for minors is not experimental in the sense of new or novel. The first reference to the use of GnRH analogs for the treatment of gender dysphoria in the medical literature was in 1998, over 25 years ago.<sup>21</sup> In the same year, the World Professional Association

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<sup>19</sup> Topjian AA, Raymond TT, Atkins D, et al. Part 4: Pediatric basic and advanced life support: 2020 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation*. 2020;142(16\_suppl\_2):S469-S523. These clinical practice guidelines use different terminology than the GRADE approach for describing the quality of the evidence and the strength of recommendations.

<sup>20</sup> American Psychiatric Association. Gender Dysphoria. In: *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed., text rev. American Psychiatric Publishing; 2022.

<sup>21</sup> Cohen-Kettenis PT, van Goozen SH. Pubertal delay as an aid in diagnosis and treatment of a transsexual adolescent. *Eur Child Adolesc Psychiatry*. 1998;7(4):246-248. See also Gooren L, Delemarre-van de Waal H. The feasibility of endocrine interventions in juvenile transsexuals. *J Psychol Human Sex*. 1996;8(4):69-74.

for Transgender Health (WPATH), then called the Harry Benjamin International Gender Dysphoria Association, included recommendations regarding gender-affirming hormones for adolescents in its Standards of Care (SOC).<sup>22</sup> Providers at Children's Hospital Boston began treating minors with gender-affirming hormones at this time.<sup>23</sup> Prospective observational trials of GnRH analogs began recruiting participants in 2000.<sup>24</sup> In 2007, Boston Children's Hospital established its Gender Management Service which provided treatment with GnRH analogs, in addition to gender-affirming hormones.<sup>25</sup> The Endocrine Society published its first clinical practice guideline for gender-affirming medical care, which recommended treatment with GnRH analogs, in 2009<sup>26</sup> and WPATH added recommendations about GnRH analogs in the 7<sup>th</sup> edition of its Standards of Care in 2012.<sup>27</sup>

34. The Endocrine Society published its updated clinical practice guideline for the treatment of gender-dysphoric/gender-incongruent persons, including pubertal suppression, sex

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<sup>22</sup> Levine SB, Brown G, Coleman E, et al. The standards of care for gender identity disorders. *Int J Transgend.* 1998;2(2). Gender identity disorders is the prior terminology for gender dysphoria. This is the 5<sup>th</sup> edition of the Standards of Care.

<sup>23</sup> Spack NP, Edwards-Leeper L, Feldman HA, et al. Children and adolescents with gender identity disorder referred to a pediatric medical center. *Pediatrics.* 2012;129(3):418-425.

<sup>24</sup> de Vries AL, Steensma TD, Doreleijers TA, Cohen-Kettenis PT. Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *J Sex Med.* 2011;8(8):2276-2283.

<sup>25</sup> Spack NP, Edwards-Leeper L, Feldman HA, et al. Children and adolescents with gender identity disorder referred to a pediatric medical center. *Pediatrics.* 2012;129(3):418-425.

<sup>26</sup> Hembree WC, Cohen-Kettenis P, Delemarre-van de Waal HA, et al. Endocrine treatment of transsexual persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2009;94(9):3132-3154.

<sup>27</sup> World Professional Association for Transgender Health. Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People. 7<sup>th</sup> Version. Accessed August 3, 2024. Available at [https://www.wpath.org/media/cms/Documents/SOC%20v7/SOC%20V7\\_English.pdf](https://www.wpath.org/media/cms/Documents/SOC%20v7/SOC%20V7_English.pdf).

hormone treatment, and surgery for gender confirmation, in 2017.<sup>28</sup> WPATH's Standards of Care is currently in its 8<sup>th</sup> version.<sup>29</sup> The treatments outlined in these guidelines are also endorsed by other medical professional associations including the American Academy of Family Physicians,<sup>30</sup> the AAP,<sup>31</sup> the American College of Obstetricians and Gynecologists,<sup>32</sup> the American Medical

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<sup>28</sup> Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(11):3869-3903.

<sup>29</sup> Coleman E, Radix AE, Bouman WP, et al. Standards of care for the health of transgender and gender diverse people, version 8. *Int J Transgend Health*. 2022;23(Suppl 1):S1-S259.

<sup>30</sup> American Academy of Family Physicians. Care for the transgender and gender nonbinary patient. December 2023. Accessed August 3, 2024. Available at <https://www.aafp.org/about/policies/all/transgender-nonbinary.html#:~:text=The%20American%20Academy%20of%20Family,patients%2C%20including%20children%20and%20adolescents>.

<sup>31</sup> Rafferty J, Committee on Psychosocial Aspects of Child and Family Health, Committee on Adolescence, Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness. Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. *Pediatrics*. 2018;142(4):e20182162.

<sup>32</sup> American College of Obstetricians and Gynecologists. ACOG Committee Opinion Number 823: Health care for transgender and gender diverse individuals. March 2021. Accessed August 3, 2024. Available at <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2021/03/health-care-for-transgender-and-gender-diverse-individuals/>; American College of Obstetricians and Gynecologists' Committee on Gynecologic Practice and Committee on Health Care for Underserved Women. Health care for transgender and gender diverse individuals: ACOG Committee Opinion, Number 823. *Obstet Gynecol*. 2021;137(3):e75-e88.

Association,<sup>33</sup> the APA,<sup>34</sup> the American Psychological Association,<sup>35</sup> and the Pediatric Endocrine Society.<sup>36</sup>

35. Gender-affirming medical care is also not experimental in the sense of unproven. The Endocrine Society clinical practice guideline includes 28 recommendations: 3 (11%) are based on “moderate” and 19 (68%) are based on “low” or “very low” quality evidence. The remaining 6 (21%) recommendations are Ungraded Good Practice Statements.<sup>37</sup> Table 2 (Exhibit C). Ungraded Good Practice Statements draw attention to general principles, like shared decision-making, for which direct evidence is unavailable or not systematically appraised.

36. The quality of the evidence supporting these recommendations is similar to the quality of the evidence supporting the recommendations in the AHA clinical practice guideline described above and in other Endocrine Society guidelines for the pediatric population. For

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<sup>33</sup> American Medical Association. Removing financial barriers to care for transgender patients H-185.950. 2022. Accessed August 3, 2024. Available at <https://policysearch.ama-assn.org/policyfinder/detail/H-185.950?uri=%2FAMADoc%2FHOD.xml-0-1128.xml>; Madara JL. Letter to Mr. Bill McBride. April 26, 2021. Accessed August 3, 2024. Available at <https://searchlf.ama-assn.org/letter/documentDownload?uri=%2Funstructured%2Fbinary%2Fletter%2FLETTERS%2F2021-4-26-Bill-McBride-opposing-anti-trans-bills-Final.pdf>.

<sup>34</sup> American Psychiatric Association. Position statement on treatment of transgender (trans) and gender diverse youth. July 2020. Accessed August 3, 2024. Available at <https://www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-Transgender-Gender-Diverse-Youth.pdf>.

<sup>35</sup> American Psychological Association. Transgender, gender identity, and gender expression non-discrimination. August 2008. Accessed August 3, 2024. Available at <https://www.apa.org/about/policy/transgender.pdf>.

<sup>36</sup> Endocrine Society and Pediatric Endocrine Society. Transgender health: Position statement. December 2020. Accessed August 3, 2024. Available at [https://www.endocrine.org/-/media/endocrine/files/advocacy/position-statement/position\\_statement\\_transgender\\_health\\_pes.pdf](https://www.endocrine.org/-/media/endocrine/files/advocacy/position-statement/position_statement_transgender_health_pes.pdf).

<sup>37</sup> Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(11):3869-3903.

example, none of the Endocrine Society’s 84 recommendations in its two other guidelines that focus on the pediatric population—guidelines on pediatric obesity and congenital adrenal hyperplasia—is based on “high” quality evidence. Twenty-four (29%) of the recommendations are based on “moderate,” and 49 (58%) on “low” or “very low” quality evidence. The remaining recommendations (11, 13%) are Ungraded Good Practice Statements.<sup>38</sup> Table 2 (Exhibit C).

37. With respect to GnRH analogs, the Endocrine Society specifically “suggest[s] that adolescents who meet diagnostic criteria for [gender dysphoria]/gender incongruence, fulfill criteria for treatment, . . . and are requesting treatment should initially undergo treatment to suppress pubertal development.”<sup>39</sup> The evidence for this recommendation includes a longitudinal study of a group of 70 transgender adolescents who were evaluated using objective measures prior to both pubertal suppression and sex hormone treatment. The mean length of time between the start of pubertal suppression and sex hormone treatment was 1.88 years and ranged from 0.42 to 5.06 years. The study showed statistically significant decreases in behavioral and emotional problems and depressive symptoms, and increases in general functioning.<sup>40</sup>

38. This is the same level of evidence as supports the use of GnRH analogs for the treatment of central precocious puberty which the Ban permits. Central precocious puberty is the

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<sup>38</sup> Speiser PW, Arlt W, Auchus RJ, et al. Congenital adrenal hyperplasia due to steroid 21-hydroxylase deficiency: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2018;103(11):4043-4088; Styne DM, Arslanian SA, Connor EL, et al. Pediatric obesity—assessment, treatment, and prevention: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2017;102(3):709-757.

<sup>39</sup> Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2017;102(11):3880.

<sup>40</sup> de Vries AL, Steensma TD, Doreleijers TA, Cohen-Kettenis PT. Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *J Sex Med.* 2011;8(8):2276-2283.



premature initiation of puberty, before 8 years of age in people assigned female at birth and before 9 in people assigned male, by the central nervous system. The potential negative effects of precocious puberty include impairment of final adult height as well as antisocial behavior and lower academic achievement. There are no randomized trials evaluating the adult height of treated and untreated individuals. Most studies are observational and compare pretreatment predicted final height with actual final height. These studies have additional limitations including small sample sizes. This “low” quality evidence nonetheless is sufficient to support the use of GnRH analogs as treatment for central precocious puberty.<sup>41</sup> The Ban therefore subjects the use of GnRH analogs to a double standard. There are no randomized clinical trials for the use of GnRH analogs to treat precocious puberty or gender dysphoria, but the evidence is deemed sufficient for the former but not the latter.

39. The evidence supporting the guideline’s recommendations regarding gender-affirming hormone treatment in adolescents include Annelou L. C. de Vries and colleagues’ longer-term follow-up of individuals after pubertal suppression through sex hormone and gender-affirming surgical treatment. Participants’ mean age at their initial assessment was 13.6 years and their mean age at their final assessment was 20.7 years. The researchers report the resolution of gender dysphoria and improvement in psychological functioning.<sup>42</sup>

40. As a result of these studies and healthcare providers’ subsequent experience,

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<sup>41</sup> Mul D, Hughes IA. The use of GnRH agonists in precocious puberty. *Eur J Endocrinol.* 2008;159(Suppl 1):S3-S8.

<sup>42</sup> See de Vries AL, McGuire JK, Steensma TD, Wagenaar EC, Doreleijers TA, Cohen-Kettenis PT. Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics.* 2014;134(4):696-704. Additional longitudinal studies of the psychosocial effects of pubertal suppression to treat gender dysphoria include Costa R, Dunsford M, Skagerberg E, Holt V, Carmichael P, Colizzi M. Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *J Sex Med.* 2015;12(11):2206-2214 and

randomized, placebo-controlled trials (trials that compare pharmacological treatment to no pharmacological treatment) of gender-affirming medical care are currently unethical. Potential investigators do not have equipoise between pharmacological treatment and no pharmacological treatment; they believe that pharmacological treatment is superior. It is also highly unlikely that a sufficient number of participants would enroll in randomized controlled trials for them to be informative.<sup>43</sup>

41. Even if such studies could be conducted ethically, they would provide a lower quality of evidence because of intrinsic limitations in their design. For example, it would be impossible to blind/mask the investigators or the participants to whether the participants were receiving the active treatment or a placebo. They would know if participants were in the intervention or the control arm of the study due to the physical changes in their bodies, or the lack thereof, over time. This might bias their perception of the outcomes and lower the rating of the study's quality.<sup>44</sup>

### **OFF-LABEL USE DOES NOT SUPPORT THE BAN**

42. The fact that GnRH analog and gender-affirming hormone treatment are not approved by the US Food and Drug Administration (FDA) for the treatment of gender dysphoria does not support a ban. Off-label use of FDA-approved medications is legal, common, and often

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Carmichael P, Butler G, Masic U, et al. Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. *PLoS One*. 2021;16(2):e0243894.

<sup>43</sup> Chew D, Anderson J, Williams K, May T, Pang K. Hormonal treatment in young people with gender dysphoria: A systematic review. *Pediatrics*. 2018;141(4):e20173742; Reisner SL, Deutsch MB, Bhasin S, et al. Advancing methods for US transgender health research. *Curr Opin Endocrinol Diabetes Obes*. 2016;23(2):198-207.

<sup>44</sup> Browner WS, Newman TB, Cummings SR, et al. *Designing Clinical Research*. 5th ed. Wolters Kluwer; 2022; Atkins D, Best D, Briss PA, et al. Grading quality of evidence and strength of recommendations. *BMJ*. 2004;328(7454):1490.

evidence-based. FDA approval is not required for each and every use of a medication. Once the FDA has approved a medication for one indication,<sup>45</sup> thereby agreeing that it is safe (i.e., its benefits outweigh its potential risks) and effective for this intended use, as is the case with the medications at issue here, prescribers are generally free to prescribe it for other indications.<sup>46</sup> The AAP Committee on Drugs states, “[i]t is important to note that the term ‘off-label’ does not imply an improper, illegal, contraindicated, or investigational use” and “[t]he administration of an approved drug for a use that is not approved by the FDA is not considered research and does not warrant special consent or review if it is deemed to be in the individual patient’s best interest.” It further states “in no way does a lack of labeling signify that therapy is unsupported by clinical experience or data in children.”<sup>47</sup> There are several reasons why, even if there is substantial

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<sup>45</sup> According to the FDA, an indication includes several factors: the particular disease or condition or the manifestation or symptoms of the disease or condition for which the drug is approved; whether the drug is approved for treatment, prevention, mitigation, cure, or diagnosis; and the population, including age group, for which the drug is safe and effective. U.S. Department of Health and Human Services, Food and Drug Administration, Center for Drug Evaluation and Research, Center for Biologics Evaluation and Research. Indications and Usage Section of Labeling for Human Prescription Drug and Biological Products—Content and Format: Guidance for Industry. July 2018. Accessed August 3, 2024. Available at <https://www.fda.gov/files/drugs/published/Indications-and-Usage-Section-of-Labeling-for-Human-Prescription-Drug-and-Biological-Products-%E2%80%94Content-and-Format-Guidance-for-Industry.pdf>. A medication approved for the treatment of asthma in adults would, for example, be prescribed off label if used to treat a different disease, like pneumonia, or a different age group, like children.

<sup>46</sup> U.S. Food & Drug Administration. Understanding Unapproved Use of Approved Drugs “Off Label.” February 5, 2018. Accessed August 3, 2024. Available at <https://www.fda.gov/patients/learn-about-expanded-access-and-other-treatment-options/understanding-unapproved-use-approved-drugs-label>.

<sup>47</sup> Frattarelli DA, Galinkin JL, Green TP, et al. Off-label use of drugs in children. *Pediatrics*. 2014;133(3):563-567. Quotations appear on pages 563, 565, and 564 respectively.

evidence of safety and efficacy for a new indication, a sponsor may not seek FDA approval for it. These reasons include that seeking approval may not be economically beneficial for the sponsor.<sup>48</sup>

43. “Off-label” use of drugs is common in many areas of medicine, including pediatrics. A recent study of children’s hospitals found that in 28.1% of encounters, at least one off-label drug was prescribed. Examples of medications used off-label in this study included: albuterol, which is used to treat asthma; morphine, which is used to treat pain; and lansoprazole (Prevacid®), which is used to treat gastroesophageal reflux.<sup>49</sup> The rate of off-label use may be significantly higher in certain age groups, categories of drugs, and clinical settings.<sup>50</sup>

## **GENERALLY APPLICABLE PRINCIPLES OF INFORMED CONSENT APPLY TO PEDIATRIC GENDER-AFFIRMING MEDICAL CARE**

### **Principles of Informed Consent**

44. Before performing any medical intervention, a healthcare provider must generally obtain an adult patient’s informed consent. Informed consent is a process in which the provider discloses information, elicits the patient’s preferences, offers medical advice, and seeks explicit authorization. In order to participate in the informed consent process, a patient must have medical decision-making capacity. If an adult patient lacks capacity, a proxy decision-maker is generally appointed. The healthcare provider’s disclosure should include the nature of the intervention and the reasons for it, as well as its potential benefits, risks, and alternatives, including the alternative of not undergoing the intervention. The patient or the patient’s proxy must understand and

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<sup>48</sup> Wittich CM, Burkle CM, Lanier WL. Ten common questions (and their answers) about off-label drug use. *Mayo Clin Proc.* 2012;87(10):982-990.

<sup>49</sup> See Yackey K, Stukus K, Cohen D, Kline D, Zhao S, Stanley R. Off-label medication prescribing patterns in pediatrics: An update. *Hosp Pediatr.* 2019;9(3):186-193.

<sup>50</sup> Maltz LA, Klugman D, Spaeder MC, Wessel DL. Off-label drug use in a single-center pediatric cardiac intensive care unit. *World J Pediatr Congenit Heart Surg.* 2013;4(3):262-266.

appreciate this information and express a decision. For the informed consent to be valid, the authorization must be voluntary. Exceptions to the requirement to obtain informed consent exist, such as in the case of an emergency.<sup>51</sup>

45. Medical decision-making and informed consent in pediatrics is more complex than in adult medicine because it involves both minor patients and their parents or legal guardians. Parents and guardians are afforded substantial, but not unlimited, discretion in making medical decisions for their minor children based on their assessment of the individual child's best interest. They generally care about their children and best understand their children's unique needs.<sup>52</sup>

46. Healthcare providers also have an ethical obligation to include children in medical decision-making to the extent that it is developmentally appropriate. For example, a provider examining a toddler for a possible ear infection should not ask a toddler for permission to look in the child's ear because the provider intends to look even if the child says no. The provider could, however, ask the toddler which ear the child would like to have looked in first. As a minor becomes older, the minor should participate more actively in medical decision-making and the minor's assent should be sought. In early adolescence, individuals typically have developed a sense of identity, individual values and preferences, and are developing medical decision-making capacity. Capacity entails the ability to (i) understand the indications and the potential benefits, risks, and alternatives to a treatment, including declining treatment; (ii) appreciate the implications of a treatment decision for their own lives; (iii) evaluate the potential benefits and risks; and

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<sup>51</sup> Beauchamp TL, Childress JF. *Principles of Biomedical Ethics*. 6th ed. Oxford University Press; 2009.

<sup>52</sup> Diekema DS. Parental refusals of medical treatment: The harm principle as threshold for state intervention. *Theor Med Bioeth*. 2004;25(4):243-264.

(iv) express a preference.<sup>53</sup> Adolescents generally possess comparable medical decision-making capacity to adults. Louis A. Weithorn and Susan B. Campbell, for example, found that 14-year-olds performed similarly to adults with respect to their ability to understand and reason about treatment information.<sup>54</sup>

47. The current treatment paradigm for treating gender dysphoria in minors is consistent with general ethical principles instantiated in the practices of informed consent and assent. The Endocrine Society clinical practice guideline extensively discusses the potential benefits, risks, and alternatives to treatment, and its recommendations regarding the timing of interventions are based in part on the treatment's potential risks and the adolescent's decision-making capacity. The guideline recommends that the informed consent process for GnRH analogs and sex hormones include a discussion of the implications for fertility and options for fertility preservation. The Endocrine Society clinical practice guideline also advises delaying gender-affirming hormone treatment, which results in partly irreversible physical changes, until an adolescent is developmentally capable of providing informed consent.<sup>55</sup> Lieke J. J. Vrouenraets and colleagues found most adolescents with gender dysphoria have sufficient medical decision-making capacity to make decisions regarding GnRH analogs.<sup>56</sup>

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<sup>53</sup> Katz AL, Webb SA, Committee on Bioethics. Informed consent in decision-making in pediatric practice. *Pediatrics*. 2016;138(2):e20161485; Kon AA, Morrison W. Shared decision-making in pediatric practice: A broad view. *Pediatrics*. 2018;142(Suppl 3):S129-S132.

<sup>54</sup> Weithorn LA, Campbell SB. The competency of children and adolescents to make informed treatment decisions. *Child Dev*. 1982;53(6):1589-1598.

<sup>55</sup> See Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(11):3869-3903.

<sup>56</sup> Vrouenraets LJJJ, de Vries ALC, de Vries MC, van der Miesen AIR, Hein IM. Assessing medical decision-making competence in transgender youth. *Pediatrics*. 2021;148(6):e2020049643.

## **Pediatric Gender-Affirming Medical Care's Benefits, Risks, and Alternatives**

48. The potential benefits of gender-affirming medical care in minors include improved physical and psychological outcomes. Starting pubertal suppression in early puberty prevents adolescents with gender dysphoria from developing secondary sex characteristics inconsistent with their gender identity, which can be extremely distressing for them, and that may be difficult, if not impossible, to eliminate once the characteristics have fully developed. Sex hormone therapy results in the development of secondary sex characteristics consistent with an individual's gender identity. Potential psychological benefits include increased quality of life and decreased depression, suicidal ideation and suicide attempts, and anxiety.<sup>57</sup>

49. As with all medical treatments, gender-affirming medical care entails risks. One of the potential risks is negative effects on fertility, but this risk should not be overstated. GnRH analogs do not, by themselves, permanently impair fertility. Children with central precocious puberty are routinely treated with GnRH analogs and have typical fertility in adulthood.<sup>58</sup> GnRH analogs are also used for fertility preservation in individuals being treated for cancer.<sup>59</sup>

50. While treatment for gender dysphoria with gender-affirming hormones may impair fertility, this is not universal and may also be reversible. There are transgender men who became

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<sup>57</sup> See, for example, Baker KE, Wilson LM, Sharma R, Dukhanin V, McArthur K, Robinson KA. Hormone therapy, mental health, and quality of life among transgender people: A systematic review. *J Endocr Soc*. 2021;5(4):1-16.

<sup>58</sup> Lazar L, Meyerovitch J, de Vries L, Phillip M, Lebenthal Y. Treated and untreated women with idiopathic precocious puberty: Long-term follow-up and reproductive outcome between the third and fifth decades. *Clin Endocrinol (Oxf)*. 2014;80(4):570-576.

<sup>59</sup> Valsamakis G, Valtetsiotis K, Charmandari E, Lambrinoudaki I, Vlahos NF. GnRH analogues as a co-treatment to therapy in women of reproductive age with cancer and fertility preservation. *Int J Mol Sci*. 2022;23(4):2287.

pregnant while on or after discontinuing testosterone therapy.<sup>60</sup> Transgender men and women are also capable of producing eggs and sperm respectively both during and after the discontinuation of gender-affirming hormone treatment.<sup>61</sup>

51. Additionally, the clinical practice guidelines discussed above recommend that healthcare providers offer individuals considering gender-affirming medical care methods to potentially preserve their fertility.<sup>62</sup>

52. The risk of infertility is also not unique to treatment for gender dysphoria. For example, parents and legal guardians consent to the treatment of medical conditions for their minor children, including some nonmalignant rheumatologic disorders and hematologic conditions, which may impair fertility.<sup>63</sup>

53. While transgender adolescents have higher rates of depression, anxiety, suicidal ideation, and suicide attempts, there are no studies indicating that those higher rates are caused or exacerbated by gender-affirming medical care.<sup>64</sup> Rather, contributing factors include conflict

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<sup>60</sup> Light AD, Obedin-Maliver J, Sevelius JM, Kerns JL. Transgender men who experienced pregnancy after female-to-male gender transitioning. *Obstet Gynecol.* 2014;124(6):1120-1127.

<sup>61</sup> Leung A, Sakkas D, Pang S, Thornton K, Resetkova N. Assisted reproductive technology outcomes in female-to-male transgender patients compared with cisgender patients: A new frontier in reproductive medicine. *Fertil Steril.* 2019;112(5):858-865; de Nie I, van Mello NM, Vlahakis E, et al. Successful restoration of spermatogenesis following gender-affirming hormone therapy in transgender women. *Cell Rep Med.* 2023;4(1):100858.

<sup>62</sup> Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2017;102(11):3869-3903.

<sup>63</sup> Delessard M, Saulnier J, Rives A, Dumont L, Rondanino C, Rives N. Exposure to chemotherapy during childhood or adulthood and consequences on spermatogenesis and male fertility. *Int J Mol Sci.* 2020;21(4):1454; Blumenfeld Z. Chemotherapy and fertility. *Best Pract Res Clin Obstet Gynaecol.* 2012;26(3):379-390; Hirshfeld-Cytron J, Gracia C, Woodruff TK. Nonmalignant diseases and treatments associated with primary ovarian failure: An expanded role for fertility preservation. *J Womens Health (Larchmt).* 2011;20(10):1467-1477.

<sup>64</sup> Haas AP, Eliason M, Mays VM, et al. Suicide and suicide risk in lesbian, gay, bisexual, and



between one's appearance and identity, stigma, and rejection.<sup>65</sup> As discussed above, the available evidence indicates that gender-affirming care improves, rather than worsens, psychological outcomes.

54. Finally, not knowing all potential harmful effects associated with a medication is not a sufficient reason for the FDA to not approve a medication, let alone for a state to ban it. The FDA requires post-marketing surveillance of medications' adverse effects because the clinical trials on which the approvals are based cannot identify all possible side effects.<sup>66</sup>

55. In determining whether the benefits of treatment outweigh the risks, medical providers and patients must also consider the potential alternatives including not providing or receiving the treatment. As stated above, prior to the initiation of gender-affirming medical care, many minors with gender dysphoria have significant, unresolved symptoms that treatment improves. Without medical treatment, these symptoms would persist. The assertion that psychotherapy alone is sufficient to treat gender dysphoria in adolescents is only supported by anecdotal evidence.<sup>67</sup>

**The Risks and Benefits of Gender-Affirming Medical Care are Comparable to Those of Other Medical Care to which Parents and Guardians May Consent**

56. Medical care for minors can require weighing potential benefits and risks in the face of uncertainty. There is nothing unique about gender-affirming medical care that justifies

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transgender populations: Review and recommendations. *J Homosex.* 2011;58(1):10-51.

<sup>65</sup> Bauer GR, Scheim AI, Pyne J, Travers R, Hammond R. Intervenable factors associated with suicide risk in transgender persons: A respondent driven sampling study in Ontario, Canada. *BMC Public Health.* 2015;15:525.

<sup>66</sup> U.S. Food & Drug Administration. Postmarketing Surveillance Programs. April 2, 2020. Accessed August 3, 2024. Available at <https://www.fda.gov/drugs/surveillance/postmarketing-surveillance-programs>.

<sup>67</sup> See, for example, Levine SB. Transitioning back to maleness. *Arch Sex Behav.* 2018;47(4):1295-1300.

singling out this medical care for prohibition based on concern for adolescents' inability to assent or parents or guardians' inability to consent. Medical decisions regarding treatment for gender dysphoria should continue to be left to the discretion of adolescents, their parents or guardians, and their healthcare providers.

57. The potential risks of gender affirming medical care are comparable to the risks parents and adolescents are permitted to assume in numerous other treatment decisions, including decisions explicitly authorized by this legislation. As described above, parents can choose treatments that have some chance of damaging their children's gonads and impairing their fertility. Individuals with some types of differences of sex development (DSDs), such as complete androgen insensitivity syndrome, are treated with sex hormones, which have comparable risks to the use of these treatments in persons with gender dysphoria.<sup>68</sup> Parents of children with some types of DSDs may even choose to have their children's gonads removed due to the possible elevated risk of malignancy, which causes infertility.<sup>69</sup> It is also my understanding that the Ban permits gender-affirming medical treatment of individuals with DSDs, which has similar risks to the use of this treatment in individuals who do not have DSDs.

58. As discussed above, the potential benefits of gender-affirming medical care, including improved psychological outcomes, frequently outweigh the potential risks.

### **Potential Regret Does Not Support the Ban**

59. Patients experiencing regret as a result of any medical treatment is profoundly unfortunate and such individuals should be provided support and additional treatment as needed.

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<sup>68</sup> Lanciotti L, Cofini M, Leonardi A, Bertozzi M, Penta L, Esposito S. Different clinical presentations and management in complete androgen insensitivity syndrome (CAIS). *Int J Environ Res Public Health*. 2019;16(7):1268.

<sup>69</sup> Abacı A, Çatlı G, Berberoğlu M. Gonadal malignancy risk and prophylactic gonadectomy in disorders of sexual development. *J Pediatr Endocrinol Metab*. 2015;28(9-10):1019-1027.

Patients expressing regret over having received a certain kind of medical care, gender-affirming or other medical care, however, does not justify banning that medical care.

60. While there are individuals who received gender-affirming medical care as minors who express regret, the available studies report that rates of regret regarding gender-affirming medical care are very low. For example, Chantal M. Wiepjes and colleagues report that 0.6% of transgender women and 0.3% of transgender men experienced regret.<sup>70</sup> Similarly, R. Hall and colleagues report regret was specifically documented in 1.1% of adult gender-diverse patients.<sup>71</sup> Banning gender-affirming medical care to prevent regret in a small minority of patients would result in harm to the majority of patients who benefit. The potential for regret should nonetheless be disclosed in the informed consent process, and support and services should be provided to individuals who experience regret.

61. The potential for regret is also not unique to gender-affirming medical care. Ironically, at the same time that South Carolina prohibits gender-affirming medical care for minors, the statute expressly allows doctors to perform irreversible genital surgeries on infants and children with DSDs at ages when they are unable to meaningfully participate in medical decision-making. The evidence base for these surgeries is poor and they are highly controversial when performed at such an early age.<sup>72</sup> Parents of children who have undergone feminizing genitoplasty

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<sup>70</sup> Wiepjes CM, Nota NM, de Blok CJ, et al. The Amsterdam Cohort of Gender Dysphoria Study (1972-2015): Trends in prevalence, treatment, and regrets. *J Sex Med.* 2018;15(4):582-590. This study analyzes all individuals who presented to the clinic, whether they presented as minors or adults. Regret was assessed in individuals who had undergone gender-affirming surgery that included removal of the gonads. This surgery was only performed on adults.

<sup>71</sup> Hall R, Mitchell L, Sachdeva J. Access to care and frequency of detransition among a cohort discharged by a UK national adult gender identity clinic: Retrospective case-note review. *BJPsych Open.* 2021;7(6):e184.

<sup>72</sup> Jesus LE. Feminizing genioplasties: Where are we now? *J Pediatr Urol.* 2018;14(5):407-415; Frader J, Alderson P, Asch A, et al. Health care professionals and intersex conditions. *Arch*

and hypospadias repair have experienced regret over their decisions.<sup>73</sup> For example, Rachel S. Fisher and colleagues found that 38% of caregivers of infants with congenital adrenal hyperplasia reported some level of regret about their child's genital surgery.<sup>74</sup>

#### **THE INCREASED PREVALENCE OF GENDER-AFFIRMING CARE DOES NOT SUPPORT THE BAN**

62. The increased number of transgender individuals and those receiving medical treatment does not justify the Ban. The causes of these changes are likely to be multifactorial including increased social acceptance of transgender individuals and availability of gender-affirming medical care.<sup>75</sup> Changes in demographics are not unique to gender dysphoria and have been seen in other conditions such as autism spectrum disorder and childhood-onset type 1 diabetes.<sup>76</sup> These changes are a justification for further research on gender-affirming medical care rather than prohibiting these treatments and thereby preventing further research on them.

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*Pediatr Adolesc Med.* 2004;158(5):426-428.

<sup>73</sup> Fisher RS, Espeleta HC, Baskin LS, et al. Decisional regret about surgical and non-surgical issues after genitoplasty among caregivers of female infants with CAH. *J Pediatr Urol.* 2022;18(1):27-33; Vavilov S, Smith G, Starkey M, Pockney P, Deshpande AV. Parental decision regret in childhood hypospadias surgery: A systematic review. *J Paediatr Child Health.* 2020;56(10):1514-1520.

<sup>74</sup> Fisher RS, Espeleta HC, Baskin LS, et al. Decisional regret about surgical and non-surgical issues after genitoplasty among caregivers of female infants with CAH. *J Pediatr Urol.* 2022;18(1):27-33.

<sup>75</sup> Wiepjes CM, Nota NM, de Blok CJM, et al. The Amsterdam Cohort of Gender Dysphoria Study (1972-2015): Trends in prevalence, treatment, and regrets. *J Sex Med.* 2018;15(4):582-590.

<sup>76</sup> Christensen DL, Maenner MJ, Bilder D, et al. Prevalence and characteristics of autism spectrum disorder among children aged 4 years - Early Autism and Developmental Disabilities Monitoring Network, seven sites, United States, 2010, 2012, and 2014. *MMWR Surveill Summ.* 2019;68(2):1-19; DIAMOND Project Group. Incidence and trends of childhood type 1 diabetes worldwide 1990-1999. *Diabet Med.* 2006;23(8):857-866.

## **TREATMENT PROTOCOLS IN EUROPE DO NOT SUPPORT THE BAN**

63. Some have pointed to the actions of several European health authorities (discussed below) as support for banning gender-affirming medical care. It is difficult to evaluate some of these actions because the relevant material is not available in official English translations. While several of these authorities have conducted systematic reviews of the evidence, none have developed a formal clinical practice guideline. While both systematic reviews and clinical practice guidelines ideally grade the quality of the evidence, only clinical practice guidelines make recommendations and grade their strength. Of the documents by European health authorities that do make treatment recommendations, none rate the quality of the evidence and the strength of the recommendations.

64. Critically, none of the European health authorities has prohibited gender-affirming medical care for minors as does South Carolina. The only categorical prohibition of a form of gender-affirming medical care appears to be the Finnish Council for Choices in Health Care's statement, "[s]urgical treatments are not part of the treatment methods for dysphoria caused by gender-related conflicts in minors (2)."<sup>77</sup> (It is not clear whether surgical treatments as used in this statement includes masculinizing chest surgery.) Pubertal suppression and gender affirming hormone treatment are permitted for minors in Finland.<sup>78</sup>

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<sup>77</sup> Palveluvalikoima. Summary: Medical treatment methods for dysphoria associated with variations in gender identity in minors – recommendations. June 16, 2020. Accessed August 3, 2024. Available at [https://palveluvalikoima.fi/documents/1237350/22895008/Summary\\_minors\\_en+\(1\).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary\\_minors\\_en+\(1\).pdf?t=1631773838474](https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en+(1).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary_minors_en+(1).pdf?t=1631773838474).

<sup>78</sup> Palveluvalikoima. Summary: Medical treatment methods for dysphoria associated with variations in gender identity in minors – recommendations. June 16, 2020. Accessed August 3, 2024. Available at [https://palveluvalikoima.fi/documents/1237350/22895008/Summary\\_minors\\_en+\(1\).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary\\_minors\\_en+\(1\).pdf?t=1631773838474](https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en+(1).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary_minors_en+(1).pdf?t=1631773838474).

65. Gender-affirming medical care for minors is not banned in Sweden. While the Swedish National Board of Health and Welfare states, “Treatment with GnRH analogues, gender-affirming hormones, and mastectomy can be administered in exceptional cases (3),”<sup>79</sup> it clarifies that by exceptional cases it means the criteria used by the “Dutch protocol” which is the basis for the Endocrine Society and WPATH clinical practice guidelines. The Board also “recommends that these treatments [puberty suppressing and gender-affirming hormone therapy] be provided in the context of research”<sup>80</sup> and previously stated that this research need not be randomized, controlled trials.<sup>81</sup>

66. National Health Service (NHS) England’s recent policy changes do not ban gender-affirming medical care for minors. On March 12, 2024, NHS England announced that it will not make GnRH analogs available as “a routine commissioning treatment option” for treating minors with gender dysphoria.<sup>82</sup> However, GnRH analogs to treat adolescents with gender dysphoria are anticipated to be available through the NHS England in a clinical study that is currently being

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<sup>79</sup> Socialstyrelsen: The National Board of Health and Welfare. Care of children and adolescents with gender dysphoria: Summary of national guidelines. December 2022. Accessed August 3, 2024. Available at <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/kunskapsstod/2023-1-8330.pdf>.

<sup>80</sup> Socialstyrelsen: The National Board of Health and Welfare. Care of children and adolescents with gender dysphoria: Summary of national guidelines. December 2022. Accessed August 3, 2024. Available at <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/kunskapsstod/2023-1-8330.pdf>.

<sup>81</sup> Socialstyrelsen. Care of children and adolescents with gender dysphoria: Summary. 2022. Accessed June 28, 2023. Available at <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/kunskapsstod/2022-3-7799.pdf>.

<sup>82</sup> NHS England. Clinical Policy: Puberty suppressing hormones (PSH) for children and young people who have gender incongruence / gender dysphoria [1927]. March 12, 2024. Accessed August 3, 2024. Available <https://www.england.nhs.uk/wp-content/uploads/2024/03/clinical-commissioning-policy-gender-affirming-hormones-v2.pdf>.

designed and is expected to begin in late 2024.<sup>83</sup> Moreover, NHS England announced on March 21, 2024 that gender-affirming hormones are available as “a routine commissioning treatment option” around individuals’ 16th birthday.<sup>84</sup> The recommendations contained in Dr. Hilary Cass’s final report, issued on April 10, 2024,<sup>85</sup> are largely consistent with the NHS clinical policies pertaining to GnRH analogs and gender-affirming hormone treatment. On May 29, 2024, the Secretary of State for Health and Social Care and the Minister for Health made a temporary prohibition on the private prescription of GnRH analogs to minors for the treatment of gender

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<sup>83</sup> NHS England. Consultation report for the clinical policy on puberty suppressing hormones for children and adolescents who have gender incongruence / gender dysphoria. March 11, 2024. Accessed August 3, 2024. Available at <https://www.england.nhs.uk/publication/clinical-policy-puberty-suppressing-hormones/> under “Puberty suppressing hormones consultation report 11 March 2024.” See also NHS England. Child and Young People’s Gender Dysphoria Research Oversight Board. Accessed August 3, 2024. Available at <https://www.england.nhs.uk/commissioning/spec-services/npc-crg/gender-dysphoria-clinical-programme/implementing-advice-from-the-cass-review/cyp-gender-dysphoria-research-oversight-board/>.

<sup>84</sup> NHS England. Clinical Commissioning Policy: Prescribing of gender affirming hormones (masculinising and feminising hormones) as part of the Children and Young People’s Gender Service. March 21, 2024. Accessed August 3, 2024. Available at <https://www.england.nhs.uk/wp-content/uploads/2024/03/clinical-commissioning-policy-prescribing-of-gender-affirming-hormones.pdf>.

<sup>85</sup> Cass H. The Cass Review: Independent review of gender identity services for children and young people. April 2024. Accessed August 3, 2024. Available at <https://cass.independent-review.uk/home/publications/final-report/>.

Following the release of the Case Review’s Final Report, NHS Scotland announced a “pause” in new prescriptions for GnRH analogs and a minimum age of 18 years for new prescriptions of gender affirming hormones. See Sandyford. Gender Service for Young People at Sandyford: Important service update – Young Person’s Gender Service. Accessed August 3, 2024. Available at <https://www.sandyford.scot/sexual-health-services/gender-service-at-sandyford/gender-young-people-service/>. NHS Scotland’s Chief Medical Officer Professor Sir Gregor Smith subsequently submitted recommendations to make the services provided by NHS Scotland consistent with those of NHS England and the Cass Review. Scottish Government. Cass Review – implications for Scotland: letter from Chief Medical Officer. July 4, 2024. Accessed August 3, 2024. Available at <https://www.gov.scot/publications/cass-review-implications-for-scotland-letter-from-chief-medical-officer-professor-sir-gregor-smith/>.

dysphoria to provide consistency between the public and private healthcare systems in the U.K.<sup>86</sup>

67. None of these European health authorities have prohibited all gender-affirming medical care for minors as South Carolina has.

#### **THE BAN UNDERMINES THE INTEGRITY OF THE MEDICAL PROFESSION**

68. The Ban violates the integrity of the medical profession and coerces medical professionals to violate their integrity and ethical duties. The medical profession has processes by which it evaluates treatments and determines whether they are safe and effective. The Ban intervenes in these processes replacing medical professionals' judgement with the judgment of the legislature.

69. Healthcare providers have an ethical obligation to promote their patients' well-being and to protect them from harm. When providers believe that the potential benefits of gender-affirming medical care outweigh the potential risks for a particular patient, prohibiting them from providing this treatment forces them to violate their ethical obligations to their patients or risk losing their licenses and incurring financial penalties.

#### **THE FUNDING AND MEDICAID RESTRICTIONS LACK MEDICAL OR ETHICAL JUSTIFICATION**

70. There is no medical or ethical basis for treating gender-affirming medical or surgical care differently from other care covered by public funds or Medicaid. Gender-affirming medical care is consistent with generally accepted professional medical standards and is not experimental or investigational. It is endorsed by evidence-based clinical practice guidelines that

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<sup>86</sup> Legislation.gov.uk. The Medicines (Gonadotrophin-Releasing Hormone Analogues) (Emergency Prohibition) (England, Wales, and Scotland) Order 2024. May 29, 2024. Accessed August 3, 2024. Available at <https://www.legislation.gov.uk/uksi/2024/727/made>.



are themselves based on studies published in the peer-reviewed literature demonstrating that it improves individuals' health outcomes.

71. As described above, gender-affirming medical care is not experimental in the sense of new or novel. Gender-affirming medical and surgical care of adults substantially predates that of minors. Hormone treatment for gender dysphoria began after estrogen and testosterone became commercially available in the 1930s. The first documented male to female gender-affirming genital surgery was performed in 1931, and Christine Jorgensen famously underwent gender-affirming surgery in 1952.<sup>87</sup> WPATH developed in original SOC in 1979.<sup>88</sup>

72. As discussed earlier in this report, gender-affirming medical and surgical care is also not experimental in the sense of unproven. It is evidence-based and is supported by clinical practice guidelines developed by medical professional organizations including the Endocrine Society<sup>89</sup> and the WPATH.<sup>90</sup> The evidence base for gender-affirming medical care in adults does include randomized, double-blind, placebo-controlled trials. One trial compared the effect of testosterone combined with a 5alpha-reductase inhibitor or placebo on muscle strength.<sup>91</sup> It is important to note that this trial compared one form of gender-affirming hormone treatment to another, rather than comparing gender-affirming hormone treatment to no treatment at all. The

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<sup>87</sup> Stryker S. *Transgender History*. 2nd ed. Seal Press; 2017.

<sup>88</sup> Coleman E, Radix AE, Bouman WP, et al. Standards of care for the health of transgender and gender diverse people, version 8. *Int J Transgend Health*. 2022;23(Suppl 1):S1-S259.

<sup>89</sup> Hembree, WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoria/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(11):3869-3903.

<sup>90</sup> Coleman E, Radix AE, Bouman WP, et al. Standards of care for the health of transgender and gender diverse people, version 8. *Int J Transgend Health*. 2022;23(Suppl 1):S1-S259.

<sup>91</sup> Gava G, Armillotta F, Pillastrini P, et al. A randomized double-blind placebo-controlled pilot trial on the effects of testosterone undecanoate plus dutasteride or placebo on muscle strength, body composition, and metabolic profile in transmen. *J Sex Med*. 2021;18(3):646-655.

evidence base for gender-affirming surgical care is generally observational studies. WPATH SOC-8, for example, cites five prospective observational studies of gender-affirming chest surgery in individuals assigned female at birth and 8 prospective observational studies of gender-affirming vaginoplasty in individuals assigned male at birth.

73. As described above, the use of GnRH analogs, estrogen, and testosterone “off-label” in gender-affirming medical care also does not inherently imply that this use is experimental.

74. The Funding and Medicaid Restrictions do not provide a sound basis for excluding coverage of gender-affirming medical care and treating it differently from other comparable medical interventions. For example, H 4624 does not exclude coverage for the use of GnRH analogs to treat central precocious puberty, but prohibits coverage for its use to treat gender dysphoria, even though its use to treat both conditions is supported by comparable levels of evidence.

75. Additionally, while the Funding and Medicaid Restrictions would eliminate coverage of chest surgery for the treatment of gender dysphoria for individuals with state-funded health insurance or for Medicaid beneficiaries, individuals with those kinds of health insurance are provided coverage for comparable surgeries, such as those for gynecomastia. Gynecomastia is the proliferation of ductal or glandular breast tissue, as opposed to adipose tissue or fat, in individuals who sex assigned at birth is male. While surgeries to treat gynecomastia may at times be performed to lessen pain, they are commonly performed to reduce psychosocial distress. Surgery affirms patients’ gender identity, that is, to help someone assigned male at birth feel more typically masculine. Risks associated with the procedure include bruising, bleeding, infection, scarring, poor

cosmetic outcome, and loss of sensation.<sup>92</sup> There is nothing unique about chest surgery for gender dysphoria that justifies singling this treatment, or other medical or surgical treatments for gender dysphoria, out for non-coverage.

## CONCLUSION

76. Treating adolescents with gender dysphoria with gender-affirming medical care under clinical practice guidelines, like the Endocrine Society's, is evidence-based; its potential benefits outweigh its potential risks for many patients; and these risks are well within the range of other medical decisions that adolescents and their parents or guardians have the discretion to make in consultation with their healthcare professionals.

77. Based on my research and experience as a pediatrician and bioethicist, there is no sound medical or ethical basis to prohibit healthcare professionals from providing gender-affirming medical care to minors. Doing so puts clinicians in the untenable position of having to harm their patients and violate their integrity and ethical obligations due to the threat of administrative and civil penalties.

78. There is not a sound medical or ethical basis for excluding gender-affirming medical or surgical care for minors or adults from coverage by public funds or Medicaid. Care for adults is evidence-based and is not experimental. Excluding coverage for gender-affirming medical and surgical care is also inconsistent with the program's other coverage decisions.

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<sup>92</sup> Nordt CA, DiBVasta AD. Gynecomastia in adolescents. *Curr Opin Pediatr*. 2008;20(4):375-382.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on AUGUST 8, 2024

Armand H. Matheny Antommaria

ARMAND H. MATHENY ANTOMMARIA, MD, PhD

## EXHIBIT A

### Curriculum Vitae

Last Updated: August 3, 2024

#### **PERSONAL DATA**

Armand H. Matheny Antommara, MD, PhD, FAAP, HEC-C

Birth Place: Pittsburgh, Pennsylvania

Citizenship: United States of America

#### **CONTACT INFORMATION**

Address: 3333 Burnet Ave, ML 15006, Cincinnati, OH 45229

Telephone Number: (513) 636-4939

Electronic Mail Address: armand.antommara@cchmc.org

#### **EDUCATION**

|           |             |   |
|-----------|-------------|---|
| 1983-1987 | BSEE        | Valparaiso University, with High Distinction<br>Valparaiso, IN                    |
| 1983-1987 | BS          | Valparaiso University (Chemistry), with High Distinction<br>Valparaiso, IN        |
| 1987-1989 | MD          | Washington University School of Medicine<br>Saint Louis, MO                       |
| 1989-2000 | PhD         | The University of Chicago Divinity School (Religious Ethics)<br>Chicago, IL       |
| 2000-2003 | Resident    | University of Utah (Pediatrics)<br>Salt Lake City, UT                             |
| 2005-2006 | Certificate | Conflict Resolution Certificate Program, University of Utah<br>Salt Lake City, UT |

#### **BOARD CERTIFICATION**

2019 Pediatric Hospital Medicine, American Board of Pediatrics

2019 Healthcare Ethics Consultant-Certified, Healthcare Ethics Consultation Certification Commission

2004 General Pediatrics, American Board of Pediatrics

#### **PROFESSIONAL LICENSES**

2012-Present Doctor of Medicine, Ohio

2006-2010 Alternative Dispute Resolution Provider—Mediator, Utah

2001-2014 Physician and Surgeon, Utah

2001-2014 Physician and Surgeon Controlled Substance, Utah

#### **PROFESSIONAL EXPERIENCE**

##### **Full Time Positions**

2019-Present *Professor*  
Cincinnati Children's Hospital Medical Center, Cincinnati, OH  
Department of Surgery

2019-Present *Professor of Clinical-Affiliated*  
University of Cincinnati, Cincinnati, OH  
Department of Surgery

2017-Present *Professor*  
Cincinnati Children's Hospital Medical Center, Cincinnati, OH  
Division of Pediatric Hospital Medicine

2017-Present *Professor of Clinical-Affiliated*  
University of Cincinnati, Cincinnati, OH  
Department of Pediatrics

2016-2017 *Associate Professor of Clinical-Affiliated*  
University of Cincinnati, Cincinnati, OH  
Department of Pediatrics

2012-2017 *Associate Professor*  
Cincinnati Children's Hospital Medical Center, Cincinnati, OH  
Division of Pediatric Hospital Medicine

2012-Present *Lee Ault Carter Chair in Pediatric Ethics*  
Cincinnati Children's Hospital Medical Center

2012-2016 *Associate Professor-Affiliated*  
University of Cincinnati, Cincinnati, OH  
Department of Pediatrics

2010-2012 *Associate Professor of Pediatrics (with Tenure)*  
University of Utah School of Medicine, Salt Lake City, UT  
Divisions of Inpatient Medicine and Medical Ethics

2010-2012 *Adjunct Associate Professor of Medicine*  
University of Utah School of Medicine, Salt Lake City, UT  
Division of Medical Ethics and Humanities

2004-2010 *Assistant Professor of Pediatrics (Tenure Track)*  
University of Utah School of Medicine, Salt Lake City, UT  
Divisions of Inpatient Medicine and Medical Ethics

2004-2010 *Adjunct Assistant Professor of Medicine*  
University of Utah School of Medicine, Salt Lake City, UT  
Division of Medical Ethics and Humanities

2003-2004 *Instructor of Pediatrics (Clinical Track)*  
University of Utah School of Medicine, Salt Lake City, UT  
Divisions of Inpatient Medicine and Medical Ethics

2003-2004 *Adjunct Instructor of Medicine*  
University of Utah School of Medicine, Salt Lake City, UT  
Division of Medical Ethics

### **Part Time Positions**

2024-Present *Expert Witness, Report*  
Van Garderen, et al., v. Montana, et al., Montana Fourth Judicial District Court,  
Missoula County. Cause No. DV 2023-541.

2024-Present *Expert Witness, Report, Deposition, and Testimony*  
Moe, et al., v. Yost, et al., Court of Common Pleas, Franklin County, Ohio. Case  
No. 24-CV-002481.

2024-Present *Expert Witness*, Report and Deposition  
Noe, et al., v. Parson, et al., Circuit Court of Cole County State of Missouri. Case No. 23AC-CC04530.

2023-Present *Expert Witness*, Report  
Voe, et al., v. Mansfield, et al., United States District Court, Middle District of North Carolina. Case No. 1:23-CV-864-LCB-LPA

2023-Present *Expert Witness*, Report and Deposition  
Zayre-Brown v. The North Carolina Department of Public Safety, et al., United States District Court, Western District of North Carolina, Case No. 3:22-CV-01910-MOC-DCK

2023-Present *Expert Witness*, Report  
Poe, et al., v. Drummond, et al., United States District Court, Northern District of Oklahoma, Case No. 23-cv-00177-JFH-SH

2023-Present *Expert Witness*, Report  
L.W., et al., v. Skrmetti, et al., United States District Court, Middle District of Tennessee, Case No. 3:23-cv-00376.

2022-2023 *Expert Witness*, Report, Deposition, and Testimony  
Dekker, et al., v. Marsteller, et al., United States District Court, Northern District of Florida, Case No. 4:22-cv-00325-RH-MAF

2022- Present *Expert Witness*, Report, Deposition, and Testimony  
Boe, et al., and United States, v. Marshall, et al., United States District Court, Middle District of Alabama Northern Division, Case No. 2:22-cv0-184-LCB.

2022 *Expert Witness*, Report  
Jeffrey Walker, et al., v. Steven Marshall, et al., United States District Court, Middle District of Alabama Northern Division

2022-Present *Expert Witness*, Report and Testimony  
Jane Doe, et al., v. Greg Abbott, et al., District Court of Travis County, Texas 353<sup>rd</sup> Judicial District, Case No. D-1-GN-22-000977

2021-2022 *Expert Witness*, Reports, Deposition, and Testimony  
Dylan Brandt, et al., v. Leslie Rutledge, et al., United States District Court, Eastern District of Arkansas, Case No.: 5:21-CV-00450-JM-1

2021 *Consultant*  
Proctor & Gamble, Cincinnati, OH

2019 *Consultant*  
Sanofi Genzyme, Cambridge, MA

2018-2023 *Consultant*  
Center for Conflict Resolution in Healthcare, Memphis, TN

2017-2020 *Consultant*  
Amicus Therapeutics, Cranbury, NJ

2017 *Expert Witness*, Report  
Robert J. Klickovich, MD, PLLC v. Tristate Arthritis & Rheumatology, PSC, *et al.*, Commonwealth of Kentucky, Boone Circuit Court, Division III, Civil Action No. 16-CI-01690

2017 *Consultant*  
Sarepta Therapeutics, Cambridge, MA

2014                      *Consultant*  
Genzyme, A Sanofi Company, Cambridge, MA

### **Editorial Experience**

#### Editorial Board

2020-Present   *Pediatrics*, Associate Editor for Ethics Rounds and Member of the Executive Editorial Board  
2015-2020      *Journal of Clinical Ethics*  
2009-2020      *Journal of Medical Humanities*

#### Guest Academic Editor

2017                      *PLOS|ONE*

Ad Hoc Reviewer: *Academic Medicine, Academic Pediatrics, AJOB Primary Research, American Journal of Bioethics, American Journal of Law & Medicine, American Journal of Medical Genetics, American Journal of Transplantation, Archives of Disease in Childhood, BMC Medical Ethics, BMJ Open, Canadian Journal of Bioethics, CHEST, Clinical Transplantation, European Journal of Human Genetics, European Journal of Pediatrics, Frontiers in Genetics, Hospital Medicine, International Journal of Health Policy and Management, International Journal of Nursing Studies, Journal of Adolescent and Young Adult Oncology, Journal of Clinical Ethics, Journal of Empirical Research on Human Research Ethics, Journal of General Internal Medicine, Journal of Healthcare Leadership, Journal of Hospital Medicine, Journal of the Kennedy Institute of Ethics, Journal of Law, Medicine & Ethics, Journal of Medical Ethics, Journal of Medical Humanities, Journal of Medicine and Life, Journal of Palliative Care, Journal of Pediatrics, Journal of Pediatric Surgery, Mayo Clinic Proceedings, Medicine, Healthcare and Philosophy, Molecular Diagnosis & Therapy, New England Journal of Medicine, Patient Preference and Adherence, Pediatrics, Pediatrics in Review, Personalized Medicine, PLOS|ONE, Risk Management and Healthcare Policy, Saudi Medical Journal, SSM - Qualitative Research in Health, and Theoretical Medicine and Bioethics*

### **SCHOLASTIC AND PROFESSIONAL HONORS**

2024                      *Member, Sigma Xi: The Scientific Research Honor Society, Research Triangle Park, NC*  
2023                      *Digital Health Award, Bronze Medal in the Digital Health Media/Publications category for Pediatric Collections: Ethics Rounds: A Casebook in Pediatric Bioethics Part II, Health Information Resource Center, Libertyville, IL*  
2021                      *Hidden Gem Award, Cincinnati Children's Hospital Medical Center, Cincinnati, OH*  
2019-2023              *Presidential Citation, American Society for Bioethics and Humanities, Chicago, IL*  
2016                      *Laura Mirkinson, MD, FAAP Lecturer, Section on Hospital Medicine, American Academy of Pediatrics, Elk Grove Village, IL*  
2016, 2018              *Certificate of Excellence, American Society for Bioethics and Humanities, Glenview, IL*  
2013, 2016              *Senior Resident Division Teaching Award, Cincinnati Children's Hospital Medical Center, Cincinnati, OH*



|           |  |
|-----------|--|
| 2012      | <i>Role Model</i> , Quality Review Committee, Primary Children's Medical Center, Salt Lake City, UT            |
| 2011      | <i>Member</i> , Society for Pediatric Research, The Woodlands, TX  |
| 2011      | <i>Presidential Citation</i> , American Society for Bioethics and Humanities, Glenview, IL                     |
| 2009      | <i>Role Model</i> , Quality Review Committee, Primary Children's Medical Center, Salt Lake City, UT            |
| 2008      | <i>Nominee</i> , Physician of the Year, Primary Children's Medical Center, Salt Lake City, UT                  |
| 2005-2006 | <i>Fellow</i> , Medical Scholars Program, University of Utah School of Medicine, Salt Lake City, UT            |
| 1995-1997 | <i>Doctoral Scholar</i> , Crossroads, A Program of Evangelicals for Social Action, Philadelphia PA             |
| 1989-1992 | <i>Fellow</i> , The Pew Program in Medicine, Arts, and the Social Sciences, University of Chicago, Chicago, IL |

## **ADMINISTRATIVE EXPERIENCE**

### **Administrative Duties**

|              |   |
|--------------|---|
| 2023-2024    | <i>Chair</i> , Literature Selection Technical Review Committee, National Library of Medicine, Bethesda, MD  |
| 2019-Present | <i>Chair</i> , Oversight Committee, Cincinnati Fetal Center, Cincinnati, OH   |
| 2014-Present | <i>Chair</i> , Ethics Committee, Cincinnati Children's Hospital Medical Center, Cincinnati, OH  |
| 2012-Present | <i>Director</i> , Ethics Center, Cincinnati Children's Hospital Medical Center, Cincinnati, OH  |
| 2012-Present | <i>Chair</i> , Ethics Consultation Subcommittee, Cincinnati Children's Hospital Medical Center, Cincinnati, OH  |
| 2010         | <i>Co-Chair</i> , Ethics Subcommittee, Work Group for Emergency Mass Critical Care in Pediatrics, Centers for Disease Control and Prevention, Atlanta, GA |
| 2009         | <i>Chair</i> , Ethics Working Group, H1N1 and Winter Surge, Primary Children's Medical Center, Salt Lake City, UT   |
| 2005-2012    | <i>Chair</i> , Ethics Committee, Primary Children's Medical Center, Salt Lake City, UT  |
| 2005-2012    | <i>Chair</i> , Ethics Consultation Subcommittee, Primary Children's Medical Center, Salt Lake City, UT  |
| 2003-4       | <i>Chair</i> , Clinical Pertinence Committee, Primary Children's Medical Center, Salt Lake City, UT   |

### **Professional & Scientific Committees**

#### **Committees**

|              |   |
|--------------|---|
| 2023-Present | <i>Member</i> , Expert Committee, Humanitarian Access Program, Alnylam Pharmaceuticals, Cambridge, MA |
| 2021         | <i>Member</i> , EMCO Capacity Collaboration, Ohio Hospital Association, Columbus, OH                  |
| 2020-2021    | <i>Member</i> , Allocation of Scarce Resources Work Group, Ohio Hospital Association, Columbus, OH    |

2020-2024 *Member*, Literature Selection Technical Review Committee, National Library of Medicine, Bethesda, MD

2020 *Member*, Crisis Standards of Care Workgroup, The Health Collaborative, Cincinnati, OH

2019-2023 *Member*, Healthcare Ethics Consultant Certification Commission, Oak Park, IL

2019 *Member*, Expert Panel, Pediatric Oncology End-of-Life Care Quality Markers, Institute for Cancer Outcomes & Survivorship, University of Alabama at Birmingham, Birmingham, AL

2018 *Member*, Resource Planning and Allocation Team Implementation Task Force, Ohio Department of Health, Columbus, OH

2012-2022 *Member*, Gaucher Initiative Medical Expert Committee, Project HOPE, Millwood, VA

2009-2014 *Member*, Clinical Ethics Consultation Affairs Committee, American Society for Bioethics and Humanities, Glenview, IL

2005-2011 *Member*, Committee on Bioethics, American Academy of Pediatrics, Oak Park, IL

#### Data Safety and Monitoring Boards

2019-Present *Member*, Data and Safety Monitoring Board, Sickle Cell Domestic Trials, National Heart, Lung, and Blood Institute, Bethesda, MD

2018-2019 *Member*, Standing Safety Committee for P-188-NF (Carmeseal-MD™) in Duchenne Muscular Dystrophy, Phrixus Pharmaceuticals, Inc., Ann Arbor, MI

2017-Present *Member*, Observational Study Monitoring Board, Sickle Cell Disease Observational Monitoring Board, National Heart, Lung, and Blood Institute, Bethesda, MD

2016-2018 *Member*, Observational Study Monitoring Board, Long Term Effects of Hydroxyurea in Children with Sickle Cell Anemia, National Heart, Lung, and Blood Institute, Bethesda, MD

#### Reviewer

2020-Present *Abstract Reviewer*, American Society for Bioethics and Humanities Annual Meeting

2020 *Grant Reviewer*, The Croatian Science Foundation, Hrvatska zaklada za znanost (HRZZ)

2018 *Book Proposal Reviewer*, Elsevier

2018-2019 *Category Leader*, Religion, Culture, and Social Sciences, American Society for Bioethics and Humanities Annual Meeting

2017 *Timekeeper*, American Society for Bioethics and Humanities Annual Meeting

2017-Present *Abstract Reviewer*, Pediatric Academic Societies Annual Meeting

2016-2021 *Workshop Reviewer*, Pediatric Academic Societies Annual Meeting

2016 *Grant Reviewer*, Innovation Research Incentives Scheme, The Netherlands Organisation for Health Research and Development

2016-2017 *Abstract Reviewer*, American Society for Bioethics and Humanities Annual Meeting

2014, 2016 *External Peer Reviewer*, PSI Foundation, Toronto, Ontario, Canada

|           |  |
|-----------|--|
| 2014      | <i>Member, Scientific Committee, International Conference on Clinical Ethics and Consultation</i>  |
| 2013      | <i>Abstract Reviewer, American Society for Bioethics and Humanities Annual Meeting</i>   |
| 2013      | <i>Reviewer, Open Research Area Plus, Agence Nationale de la Recherche, Deutsche Forschungsgemeinschaft, Economic and Social Research Council, National Science Foundation, and Organization for Scientific Research</i> |
| 2011-2012 | <i>Abstract Reviewer, Pediatric Academic Societies Annual Meeting</i>  |
| 2011-2013 | <i>Workshop Reviewer, Pediatric Academic Societies Annual Meeting</i>  |
| 2011-2014 | <i>Abstract Reviewer, Pediatric Hospital Medicine Annual Meeting</i>   |
| 2011-2012 | <i>Religious Studies Subcommittee Leader, Program Committee, American Society for Bioethics and Humanities Annual Meeting</i>  |
| 2010      | <i>Abstract Reviewer, American Society for Bioethics and Humanities Annual Meeting</i>   |
| Other     |  |
| 2023      | <i>Member, Student Paper Committee, American Society for Bioethics and Humanities</i>  |
| 2021      | <i>Timekeeper, American Society for Bioethics and Humanities Annual Meeting</i>  |
| 2021      | <i>Mentor, Early Career Advisor Professional Development Track, American Society for Bioethics and Humanities.</i>   |
| 2021      | <i>Mentor, Early Career Advisor Paper or Project Track, American Society for Bioethics and Humanities.</i>   |
| 2109      | <i>Mentor, Early Career Advising Program, American Society for Bioethics and Humanities</i>  |
| 2018      | <i>Passing Point Determination, Healthcare Ethics Consultant-Certified Examination, Healthcare Ethics Consultant Certification Commission</i>  |
| 2018      | <i>Member, Examination Committee, Healthcare Ethics Consultant-Certified Examination, Healthcare Ethics Consultant Certification Commission</i>  |
| 2018      | <i>Item Writer, Healthcare Ethics Consultant-Certified Examination, Healthcare Ethics Consultant Certification Commission</i>  |

## **UNIVERSITY COMMUNITY ACTIVITIES**

### **Cincinnati Children's Hospital Medical Center**

|              |  |
|--------------|--|
| 2023-Present | <i>Member, Artificial Intelligence Governance Council</i>  |
| 2023-Present | <i>Member, Executive Committee, Discover Together Biobank</i>  |
| 2020-Present | <i>Member, Faculty Diversity and Inclusion Steering Committee</i>  |
| 2020-2022    | <i>Member, Medical Management of COVID-19 Committee</i>  |
| 2020-2021    | <i>Member, Caregiver Refusal Team</i>  |
| 2020-2021    | <i>Member, COVID-19 Vaccine Allocation Committee</i>   |
| 2020         | <i>Member, Personal Protective Equipment Subcommittee of the COVID-19 Steering Committee</i>                                 |
| 2018-2019    | <i>Member, Planning Committee, Center for Clinical &amp; Translational Science &amp; Training Research Ethics Conference</i> |
| 2017-Present | <i>Member, Donor Selection Committee</i>   |
| 2017-2020    | <i>Member, Employee Emergency Fund Review Committee</i>  |

2017 *Member*, Root Cause Analysis Team  
 2016-2017 *Member*, Planning Committee, Center for Clinical & Translational Science & Training Research Ethics Conference  
 2015-2019 *Member*, Destination Excellence Medical Advisory Committee  
 2015-Present *Member*, Disorders of Sexual Development Case Review Committee  
 2015-2019 *Member*, Destination Excellence Case Review Committee  
 2014-2018 *Member*, Genomics Review Group, Institutional Review Board  
 2014-2017 *Member*, Center for Pediatric Genomics Leadership Committee  
 2013-2017 *Member*, Genetic Testing Subcommittee, Health Network  
 2013-2016 *Member*, Schwartz Center Rounds Planning Committee  
 2013-2014 *Member*, Genomics Ad Hoc Subcommittee, Board of Directors  
 2012-Present *Member*, Cincinnati Fetal Center Oversight Committee  
 2012-Present *Member*, Ethics Committee  
 2012-Present *Member*, G-23  
 2012-2016 *Member*, Integrated Solid Organ Transplant Steering Committee

#### **University of Utah**

2009-2012 *Member*, Consolidated Hearing Committee

#### **University of Utah School of Medicine**

2010-2012 *Member*, Medical Ethics, Humanities, and Cultural Competence Thread Committee  
 2008-2010 *Member*, Fourth Year Curriculum Committee

#### **University of Utah Department of Pediatrics**

2010-2011 *Member*, Planning Committee, 25<sup>th</sup> Annual Biological Basis of Children's Health Conference, "Sex, Gender, and Sexuality"  
 2009-2012 *Member*, Medical Executive Committee  
 2005-2012 *Member*, Retention, Promotion, and Tenure Committee  
 2004-2012 *Interviewer*, Residency Program  
 2003-2012 *Member*, Education Committee

#### **Intermountain Healthcare**

2009-2012 *Member*, System-Wide Bioethics Resource Service  
 2009-2012 *Member*, Pediatric Guidance Council

#### **Primary Children's Medical Center**

2012-2012 *Member*, Shared Accountability Organization Steering Committee  
 2009 *Member*, H1N1 and Winter Surge Executive Planning Team  
 2005-2010 *Member*, Continuing Medical Education Committee  
 2005-2010 *Member*, Grand Rounds Planning Committee  
 2003-2012 *Member*, Ethics Committee

#### **ACTIVE MEMBERSHIPS IN PROFESSIONAL SOCIETIES**

2012-Present Association of Bioethics Program Directors  
 2011-Present Society for Pediatric Research

2000-Present American Academy of Pediatrics  
1999-Present American Society of Bioethics and Humanities

## **FUNDING**

### **Past Grants**

2015-2019 “Better Outcomes for Children: Promoting Excellence in Healthcare Genomics to Inform Policy.”  
Percent Effort: 9%  
National Human Genome Research Institute  
Grant Number: 1U01 HG008666-01  
Role: Investigator

2015-2016 “Ethics of Informed Consent for Youth in Foster Care”  
Direct Costs: \$10,000  
Ethics Grant, Center for Clinical and Translational Science and Training  
University of Cincinnati Academic Health Center  
Role: Co-Investigator

2014-2015 “Extreme Personal Exposure Biomarker Levels: Engaging Community Physicians and Ethicists for Guidance”  
Direct Costs: \$11,640  
Center for Environmental Genetics  
University of Cincinnati College of Medicine  
Role: Investigator

2014-2015 “Child, Adolescent, and Parent Opinions on Disclosure Policies for Incidental Findings in Clinical Whole Exome Sequencing”  
Direct Costs: \$4,434  
Ethics Grant, Center for Clinical and Translational Science and Training,  
University of Cincinnati Academic Health Center  
Role: Principal Investigator

2013-2014 “Better Outcomes for Children: GWAS & PheWAS in eMERGEII  
Percent Effort: 5%  
National Human Genome Research Institute  
Grant Number: 3U01HG006828-0251  
Role: Investigator

2004-2005 "Potential Patients' Knowledge, Attitudes, and Beliefs Regarding Participating in Medical Education: Can They be Interpreted in Terms of Presumed Consent?"  
Direct Costs: \$8,000  
Interdisciplinary Research in Applied Ethics and Human Values, University  
Research Committee, University of Utah  
Role: Principal Investigator

## **TEACHING RESPONSIBILITIES/ASSIGNMENTS**

### **Course and Curriculum Development**

2003-2012 Medical Ethics, Internal Medicine 7560, University of Utah School of Medicine, Taught 1 time per year, Taken by medical students, Enrollment 100

### **Course Lectures**

2018, 2021- Introduction to Biotechnology, “Ethics and Biotechnology” and “Clinical Ethics,” BIOL

Present 3027, University of Cincinnati, Taught 1 time per year, Taken by undergraduate students, Enrollment 25.

2018-Present Biomedical Ethics, “Conscientious Objection in Healthcare” and “Ethical Issues in the Care of Transgender Adolescents,” MEDS 4035 & MEDS 4036, University of Cincinnati College of Medicine, Taught 1 time per year, Taken by senior undergraduate students, Enrollment 52.

2016 Foundations of Healthcare Ethics and Law, “Clinical Ethics,” HESA 390, Xavier University.

2014-2020 Physicians and Society, “Transfusion and the Jehovah’s Witness Faith,” “Obesity Management: Ethics, Policy, and Physician Implicit Bias,” “Embryos and Ethics: The Ethics of Designer Babies,” “Ethics and Genetic Testing,” and “Ethics and Direct to Consumer Genetic Testing,” 26950112 and 26950116, University of Cincinnati School of Medicine, Taken by first and second year medical students, Enrollment 100.

2014-Present Ethical Issues in Health Care, “Ethical Issues in Managing Drug Shortages: The Macro, Meso, and Micro Levels,” HESA 583, College of Social Sciences, Health, and Education Health Services Administration, Xavier University, Taken by health services administration students, Enrollment 25.

2009 Physical Diagnosis II, Internal Medicine 7160, University of Utah School of Medicine, Taught 1 time per year, Taken by medical students, Enrollment 100

2003-2012 Medical Ethics, Internal Medicine 7560, University of Utah School of Medicine, Taught 1 time per year, Taken by fourth year medical students, Enrollment 100

### **Small Group Teaching**

2024 Clinical Ethics Consortium Tutorial B, BETH 731B, Harvard Medical School, Taught 1 time, Taken by Master of Science in Bioethics students.

2018-Present Ethics in Research, GNTD 7003-001, University of Cincinnati School of Medicine, Taught 1 time per year, Taken by fellows, MS, and PhD students, Enrollment 110.

2007 Physical Diagnosis I, Internal Medicine 7150, University of Utah School of Medicine, Taught 1 time per year, Taken by medical students, Enrollment 100

2003-2012 Medical Ethics, Internal Medicine 7560, University of Utah School of Medicine, Taught 1 time per year, Taken by fourth medical students, Enrollment 100

2003 Pediatric Organ System, Pediatrics 7020, University of Utah School of Medicine, Taught 1 time per year, Taken by medical students, Enrollment 100

### **Graduate Student Committees**

- 2018-2022 *Chair*, Scholarship Oversight Committee, William Sveen, Pediatric Critical Care Fellowship, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
- 2018-2020 *Member*, Scholarship Oversight Committee, Anne Heuerman, Genetic Counseling, University of Cincinnati, Cincinnati, OH
- 2017-2019 *Chair*, Scholarship Oversight Committee, Bryana Rivers, Genetic Counseling, University of Cincinnati, Cincinnati, OH
- 2013-2015 *Mentor*, Sophia Hufnagel, Combined Pediatrics/Genetics Residency, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
- 2013-2015 *Co-Chair*, Scholarship Oversight Committee, Andrea Murad, Genetic Counseling, University of Cincinnati, Cincinnati, OH
- 2013-2014 *Member*, Scholarship Oversight Committee, Grace Tran, Genetic Counseling, University of Cincinnati, Cincinnati, OH
- 2011-2012 *Chair*, Scholarship Oversight Committee, Kevin E. Nelson, MD, PhD, Pediatric Inpatient Medicine Fellowship, University of Utah, Salt Lake City, UT

### **Continuing Education Lectures**

- 2008 *Choosing Healthplans All Together (CHAT) Exercise Facilitator*, 18<sup>th</sup> Annual Intermountain Medical Ethics Conference, "Setting Priorities for Healthcare in Utah: What Choices are We Ready to Make?," Salt Lake City, Utah, October 3.
- 2007 *Speaker*, Infant Medical Surgical Unit, Primary Children's Medical Center, "Withholding and Withdrawing Artificial Nutrition and Hydration: Can It Be Consistent With Care?," Salt Lake City, Utah, September 6.
- 2007 *Faculty Scholar-in Residence*, Summer Seminar, "The Role of Religion in Bioethics," Utah Valley State College, Orem, Utah, May 1.
- 2006 *Workshop Leader*, Faculty Education Retreat, "Publications and Publishing in Medical Education," University of Utah School of Medicine, Salt Lake City, Utah, September 15.
- 2006 *Breakout Session*, 16<sup>th</sup> Annual Intermountain Medical Ethics Conference, "Donation after Cardiac Death: Evolution of a Policy," Salt Lake City, Utah, March 28.

### **Other Educational Activities**

- 2008 *Instructor*, Contemporary Ethical Issues in Medicine and Medical Research, Osher Lifelong Learning Institute, University of Utah, "Religion and Bioethics: Religiously Based Demands for and Refusals of Treatment," Salt Lake City, Utah, February 7.
- 2007 *Speaker*, Biology Seminar, Utah Valley State College, "Is He Dead?: Criteria of the Determination of Death and Their Implications for Withdrawing Treatment and Recovering Organs for Transplant," Orem, Utah, September 21.

### **PEER-REVIEWED JOURNAL ARTICLES**

1. Armand H. Matheny Antommaria. (2024) "Decision Making for Adolescents with Gender Dysphoria." *Perspectives in Biology and Medicine*. 67: 244-60. PMID: 38828602.
2. Erica K. Salter, D. Micah Hester, Lou Vinarcsik, Armand H. Matheny Antommaria, Johan Bester, Jeffrey Blustein, Ellen Wright Clayton, Douglas S. Diekema, Ana S. Iltis, Loretta M. Kopelman, Jay R. Malone, Mark R. Mercurio, Mark C. Navin, Erin Talati Paquette, Thaddeus Mason Pope, Rosamond Rhodes, and Lainie F. Ross, (2023) "Pediatric Decision Making: Consensus Recommendations," *Pediatrics*. 152: e2023061832. PMID: 37555276.

3. William N. Sveen, Armand H. Matheny Antommara, Stephen Gilene, and Erika L. Stalets. (2023) "Adverse Events During Apnea Testing for the Determination of Death by Neurologic Criteria: A Single Center, Retrospective Pediatric Cohort." *Pediatric Critical Care Medicine*. 24: 399-405. PMID: 36815829.
4. Erica K. Salter, Jay R. Malone, Amanda Berg, Annie B. Friedrich, Alexandra Hucker, Hillary King, and Armand H. Matheny Antommara. (2023) "Triage Policies at U.S. Hospitals with Pediatric Intensive Care Units." *AJOB Empirical Bioethics*. 14: 84-90. PMID: 36576201.
5. Armand H. Matheny Antommara, Elizabeth Lanphier, Anne Housholder, and Michelle McGowan. (2023). "A Mixed Methods Analysis of Requests for Religious Exemptions to a COVID-19 Vaccine Requirement." *AJOB Empirical Bioethics*. 14: 15-22. PMID: 36161802.
6. Anne C Heuerman, Danielle Bessett, Armand H. Matheny Antommara, Leandra. K. Toluoso, Nicki Smith, Alison H. Norris and Michelle L. McGowan (2022). "Experiences of Reproductive Genetic Counselors with Abortion Regulations in Ohio." *Journal of Genetic Counseling*. 31: 641-652. PMID: 34755409.
7. Armand H. Matheny Antommara and Ndidi I. Unaka. (2021) "Counterpoint: Prioritizing Health Care Workers for Scarce Critical Care Resources is Impractical and Unjust." *Journal of Hospital Medicine*. 16: 182-3. PMID 33617445.
8. Gregory A. Grabowski, Armand H. Matheny Antommara, Edwin H. Kolodny, and Pramod K. Mistry. (2021) "Gaucher Disease: Basic and Translational Science Needs for More Complete Therapy and Management." *Molecular Genetics and Metabolism*. 132: 59-75. PMID: 33419694.
9. Armand H. Matheny Antommara, Laura Monhollen, and Joshua K. Schaffzin. (2021) "An Ethical Analysis of Hospital Visitor Restrictions and Masking Requirements During the COVID-19." *Journal of Clinical Ethics*. 32(1): 35-44. PMID 33416516.
10. Armand H. Matheny Antommara (2020) "The Pediatric Hospital Medicine Core Competencies: 4.05 Ethics." *Journal of Hospital Medicine*. 15(S1): 120-121.
11. Armand H. Matheny Antommara, Tyler S. Gibb, Amy L. McGuire, Paul Root Wolpe, Matthew K. Wynia, Megan K. Applewhite, Arthur Caplan, Douglas S. Diekema, D. Micah Hester, Lisa Soleymani Lehmann, Renee McLeod-Sordjan, Tamar Schiff, Holly K. Tabor, Sarah E. Wieten, and Jason T. Eberl for a Task Force of the Association of Bioethics Program Directors (2020) "Ventilator Triage Policies During the COVID-19 Pandemic at U.S. Hospitals Associated With Members of the Association of Bioethics Program Directors." *Annals of Internal Medicine*. 173(3): 188-194. PMID: 32330224.
12. Armand H. Matheny Antommara (2020) "Conflicting Duties and Reciprocal Obligations During a Pandemic." *Journal of Hospital Medicine*. 5:284-286. PMID: 32379030.
13. Mary V. Greiner, Sarah J. Beal, and Armand H. Matheny Antommara (2020) "Perspectives on Informed Consent Practices for Minimal-Risk Research Involving Foster Youth." *Pediatrics*. 45:e20192845. PMID: 32156772.
14. Jennifer deSante-Bertkau, Michelle McGowan, and Armand H. Matheny Antommara (2018) "Systematic Review of Typologies Used to Characterize Clinical Ethics Consultations." *Journal of Clinical Ethics*. 29:291-304. PMID: 30605439.



15. Andrew J. Redmann, Melissa Schopper, Armand H. Matheny Antommara, Judith Ragsdale, Alessandro de Alarcon, Michael J. Jutter, Catherine K. Hart, and Charles M. Myer. (2018) "To Transfuse or Not to Transfuse? Jehovah's Witnesses and PostOperative Hemorrhage in Pediatric Otolaryngology." *International Journal of Pediatric Otorhinolaryngology*. 115:188-192. PMID: 30368384.
16. Armand H. Matheny Antommara, Kyle B. Brothers, John A. Myers, Yana B Feygin, Sharon A. Aufox, Murray H. Brilliant, Pat Conway, Stephanie M. Fullerton, Nanibaa' A. Garrison, Carol R. Horowitz, Gail P. Jarvik, Rongling Li, Evette J. Ludman, Catherine A. McCarty, Jennifer B. McCormick, Nathaniel D. Mercaldo, Melanie F. Myers, Saskia C. Sanderson, Martha J. Shrubsole, Jonathan S. Schildcrout, Janet L. Williams, Maureen E. Smith, Ellen Wright Clayton, Ingrid A. Holm. (2018) "Parents' Attitudes toward Consent and Data Sharing in Biobanks: A Multi-Site Experimental Survey." *AJOB Empirical Research*. 21:1-15. PMID: 30240342.
17. Armand H. Matheny Antommara and Cynthia A. Prows. (2018) "Content Analysis of Requests for Religious Exemptions from a Mandatory Influenza Vaccination Program for Healthcare Personnel" *Journal of Medical Ethics*. 44: 389-391. PMID: 29463693.
18. Armand H. Matheny Antommara (2017) "May Medical Centers Give Nonresident Patients Priority in Scheduling Outpatient Follow-Up Appointments?" *Journal of Clinical Ethics*. 28: 217-221. PMID: 28930708.
19. Andrea M. Murad, Melanie F. Myers, Susan D. Thompson, Rachel Fisher, and Armand H. Matheny Antommara (2017) "A Qualitative Study of Adolescents' Understanding of Biobanks and Their Attitudes Toward Participation, Re-contact, and Data Sharing." *American Journal of Medical Genetics: Part A*. 173: 930-937. PMID: 28328120.
20. Saskia Sanderson, Kyle Borthers, Nathaniel Mercaldo, Ellen Wright Clayton, Armand Antommara, Sharon Aufox, Murray Brilliant, Diego Campos, David Carrell, John Connolly, Pat Conway, Stephanie Fullerton, Nanibaa Garrison, Carol Horowitz, Gail Jarvik, David Kaufman, Terrie Kitchner, Rongling Li, Evette Ludman, Catherine McCarty, Jennifer McCormick, Valerie McManus, Melanie Myers, Aaron Scrol, Janet Williams, Martha Shrubsole, Jonathan Schildcrout, Maureen Smith, and Ingrid Holm (2017) "Public Attitudes Towards Consent and Data Sharing in Biobank Research: A Large Multisite Experimental Survey in the US." *The American Journal of Human Genetics*. 100: 414-427. PMID: 28190457.
21. Maureen E. Smith, Saskia C Sanderson, Kyle B Brothers, Melanie F Myers, Jennifer McCormick, Sharon A Aufox, Martha J Shrubsole, Nanibaa' A Garrison, Nathaniel D Mercaldo, Jonathan S Schildcrout, Ellen Wright Clayton, Armand H. Matheny Antommara, Melissa Basford, Murray Brilliant, John J Connolly, Stephanie M Fullerton, Carol R Horowitz, Gail P Jarvik, Dave Kaufman, Terrie Kitchner, Rongling Li, Evette J Ludman, Catherine McCarty, Valerie McManus, Sarah C Stallings, Janet L Williams, and Ingrid A Holm (2016) "Conducting a Large, Multi-Site Survey about Patients' Views on Broad Consent: Challenges and Solutions." *BMC Medical Research Methodology*. 16: 162. PMID: 27881091.
22. Angela Lorts, Thomas D. Ryan, Armand H. Matheny Antommara, Michael Lake, and John Bucuvalas (2016) "Obtaining Consensus Regarding International Transplantation Continues to be Difficult for Pediatric Centers in the United States." *Pediatric Transplant*. 20: 774-777. PMID: 27477950.

23. Sophia B. Hufnagel, Lisa J. Martin, Amy Cassedy, Robert J. Hopkin, and Armand H. Matheny Antommara (2016) “Adolescents’ Preferences Regarding Disclosure of Incidental Findings in Genomic Sequencing That Are Not Medically Actionable in Childhood.” *American Journal of Medical Genetics Part A*. 170: 2083-2088. PMID: 27149544.
24. Nanibaa’ A. Garrison, Nila A. Sathe, Armand H. Matheny Antommara, Ingrid A. Holm, Saskia Sanderson, Maureen E. Smith, Melissa McPheeters, and Ellen Wright Clayton (2016) “A Systematic Literature Review of Individuals’ Perspectives on Broad Consent and Data Sharing in the United States.” *Genetics in Medicine*. 18: 663-71. PMID: 26583683.
25. Kyle B. Brothers, Ingrid A. Holm Janet E. Childerhose, Armand H. Matheny Antommara, Barbara A. Bernhardt, Ellen Wright Clayton, Bruce D. Gelb, Steven Joffe, John A. Lynch, Jennifer B. McCormick, Laurence B. McCullough, D. William Parsons, Agnes S. Sundaresan, Wendy A. Wolf, Joon-Ho Yu, and Benjamin S. Wilfond (2016) “When Genomic Research Participants Grow Up: Contact and Consent at the Age of Majority.” *The Journal of Pediatrics* 168: 226-31. PMID: 26477867.
26. Erin E. Bennett, Jill Sweney, Cecile Aguayo, Criag Myrick, Armand H. Matheny Antommara, and Susan L. Bratton (2015) “Pediatric Organ Donation Potential at a Children’s Hospital.” *Pediatric Critical Care Medicine*. 16: 814-820. PMID: 26237656.
27. Anita J. Tarzian, Lucia D. Wocial, and the ASBH Clinical Ethics Consultation Affairs Committee (2015) “A Code of Ethics for Health Care Ethics Consultants: Journey to the Present and Implications for the Field.” *American Journal of Bioethics*. 15: 38-51. PMID: 25970392.
28. Armand H. Matheny Antommara, Christopher A. Collura, Ryan M. Antiel, and John D. Lantos (2015) “Two Infants, Same Prognosis, Different Parental Preferences.” *Pediatrics*, 135: 918-923. PMID: 25847802.
29. Stefanie Benoit, Armand H. Matheny Antommara, Norbert Weidner, and Angela Lorts (2015) “Difficult Decision: What should we do when a VAD supported child experiences a severe stroke?” *Pediatric Transplantation* 19: 139-43. PMID: 25557132.
30. Kyle B. Brothers, John A. Lynch, Sharon A. Aufox, John J. Connolly, Bruce D. Gelb, Ingrid A. Holm, Saskia C. Sanderson, Jennifer B. McCormick, Janet L. Williams, Wendy A. Wolf, Armand H. Matheny Antommara, and Ellen W. Clayton (2014) “Practical Guidance on Informed Consent for Pediatric Participants in a Biorepository.” *Mayo Clinic Proceedings*, 89: 1471-80. PMID: 25264176.
31. Sophia M. Bous Hufnagel and Armand H. Matheny Antommara (2014) “Laboratory Policies on Reporting Secondary Findings in Clinical Whole Exome Sequencing: Initial Uptake of the ACMG’s Recommendations.” *American Journal of Medical Genetics Part A*, 164: 1328-31. PMID: 24458369.
32. Wylie Burke, Armand H. Matheny Antommara, Robin Bennett, Jeffrey Botkin, Ellen Wright Clayton, Gail E. Henderson, Ingrid A. Holm, Gail P. Jarvik, Muin J. Khoury, Barthia Maria Knoppers, Nancy A. Press, Lainie Friedman Ross, Mark A. Rothstein, Howard Saal, Wendy R. Uhlmann, Benjamin Wilfond, Susan M. Wold, and Ron Zimmern (2013) “Recommendations for Returning Genomic Incidental Findings? We Need to Talk!” *Genetics in Medicine*, 15: 854-859. PMID: 23907645.
33. Armand H. Matheny Antommara (2013) “An Ethical Analysis of Mandatory Influenza Vaccination of Health Care Personnel: Implementing Fairly and Balancing Benefits and Burdens,” *American Journal of Bioethics*, 13: 30-37. PMID: 23952830.

34. Joseph A. Carrese and the Members of the American Society for Bioethics and Humanities Clinical Ethics Consultation Affairs Standing Committee (2012) "HCEC Pearls and Pitfalls: Suggested Do's and Don't's for Healthcare Ethics Consultants," *Journal of Clinical Ethics*, 23: 234-240. PMID: 23256404.
35. Christopher G Maloney, Armand H Matheny Antommara, James F Bale Jr., Jian Ying, Tom Greene and Rajendu Srivastava (2012) "Factors Associated with Intern Noncompliance with the 2003 Accreditation Council for Graduate Medical Education's 30-hour Duty Period Requirement," *BMC Medical Education* 12: 33. PMID: 22621439.
36. Armand H. Matheny Antommara, Jill Sweney, and W. Bradley Poss (2010) "Critical Appraisal of: Triaging Pediatric Critical Care Resources During a Pandemic: Ethical and Medical Considerations," *Pediatric Critical Care Medicine*, 11:396-400. PMID: 20453611.
37. Armand H. Matheny Antommara, Karen Trotochaud, Kathy Kinlaw, Paul N. Hopkins, and Joel Frader (2009) "Policies on Donation After Cardiac Death at Children's Hospitals: A Mixed-Methods Analysis of Variation," *Journal of the American Medical Association*, 301: 1902-8. PMID: 19436017.
38. Kristine M. Pleacher, Elizabeth S. Roach, Willem Van der Werf, Armand H. Matheny Antommara, and Susan L. Bratton (2009) "Impact of a Pediatric Donation after Cardiac Death Program," *Pediatric Critical Care Medicine*, 10: 166-70. PMID: 19188881.
39. Flory L. Nkoy, Sarah Petersen, Armand H Matheny Antommara, and Christopher G. Maloney (2008) "Validation of an Electronic System for Recording Medical Student Patient Encounters," *AMIA [American Medical Informatics Association] Annual Symposium Proceedings*, 6: 510-14. PMID: 18999155. Nominated for the Distinguished Paper Award
40. Armand H. Matheny Antommara, Sean D. Firth, and Christopher G. Maloney (2007) "The Evaluation of an Innovative Pediatric Clerkship Structure Using Multiple Outcome Variables including Career Choice" *Journal of Hospital Medicine*, 2: 401-408. PMID: 18081170.
41. Armand H. Matheny Antommara (2006) "'Who Should Survive?: One of the Choices on Our Conscience:' Mental Retardation and the History of Contemporary Bioethics." *Kennedy Institute of Ethics Journal*, 16: 205-224. PMID: 17091558.
42. Armand H. Matheny Antommara (2004) "Do as I Say Not as I Do: Why Bioethicists Should Seek Informed Consent for Some Case Studies." *Hastings Center Report*, 34 (3): 28-34. PMID: 15281724.
43. Armand H. Matheny Antommara (2004) "A Gower Maneuver: The American Society for Bioethics and Humanities' Resolution of the 'Taking Stands' Debate." *American Journal of Bioethics*, 4 (Winter): W24-27. PMID: 15035934.

#### **NON PEER-REVIEWED JOURNAL ARTICLES**

1. Katherine Wade and Armand H. Matheny Antommara (2016) "Inducing HIV Remission in Neonates: Children's Rights and Research Ethics." *Journal of Medicine and Biology*, 58(3): 348-54. PMID 27157354.
2. Armand H. Matheny Antommara (2014) "Response to Open Peer Commentaries on 'An Ethical Analysis of Mandatory Influenza.'" *American Journal of Bioethics*, 14(7): W1-4. PMID: 24978422.
3. Armand H. Matheny Antommara and Brent D. Kaziny (2012) "Ethical Issues in Pediatric Emergency Medicine's Preparation for and Response to Disasters." *Virtual Mentor*, 14: 801-4. PMID: 23351860.

4. Armand H. Matheny Antommara, Tia Powell, Jennifer E. Miller, and Michael D. Christian (2011) "Ethical Issues in Pediatric Emergency Mass Critical Care," *Pediatric Critical Care Medicine*, 12(6 Suppl): S163-8. PMID: 22067926.
5. Armand H. Matheny Antommara and Emily A. Thorell (2011) "Non-Pharmaceutical Interventions to Limit Transmission of a Pandemic Virus: The Need for Complementary Programs to Address Children's Diverse Needs." *Journal of Clinical Ethics*, 22: 25-32. PMID: 21595352.
6. Armand H. Matheny Antommara (2010) "Conscientious Objection in Clinical Practice: Notice, Informed Consent, Referral, and Emergency Treatment." *Ave Maria Law Review*, 9: 81-99.
7. Armand H. Matheny Antommara (2008) "Defending Positions or Identifying Interests: The Uses of Ethical Argumentation in the Debate over Conscience in Clinical Practice," *Theoretical Medicine and Bioethics*, 29: 201-12. PMID: 18821078.
8. Armand H. Matheny Antommara (2008) "How can I give her IV antibiotics at home when I have three other children to care for?: Using Dispute System Design to Address Patient-Provider Conflicts in Health Care." *Hamline Journal of Public Law & Policy*, 29: 273-86.
9. Armand H. Matheny Antommara (2007) "Alternative Dispute Resolution and Pediatric Clinical Ethics Consultation: Why the Limits of Ethical Expertise and the Indeterminacy of the Best Interests Standard Favor Mediation." *Ohio State Journal on Dispute Resolution*, 23: 17-59.
10. Armand H. Matheny Antommara (2006) "Jehovah's Witnesses, Roman Catholicism, and Calvinism: Religion and State Intervention in Parental, Medical Decision-Making," *Journal of Law and Family Studies*, 8: 293-316.
11. Armand H. Matheny Antommara and James F. Bale, Jr. (2002) "Ethical Issues in Clinical Practice: Cases and Analyses," *Seminars in Pediatric Neurology* 9: 67-76. PMID: 11931129.

## **REVIEW ARTICLES**

Armand H. Matheny Antommara (2010) "Conceptual and Ethical Issues in the Declaration of Death: Current Consensus and Controversies." *Pediatrics in Review* 31: 427-430. PMID: 20889737.

## **BOOKS**

1. Armand H. Matheny Antommara, ed. (2022) *Ethics Rounds: A Casebook in Pediatric Bioethics Part II*. Itasca, IL: American Academy of Pediatrics.
2. Armand H. Matheny Antommara (1998) *A Retrospective, Political and Ethical Analysis of State Intervention into Parental Healthcare Decisions for Infants with Disabilities*. Wynnewood, Pennsylvania: Evangelicals for Social Action.

## **BOOK CHAPTERS**

1. Armand H. Matheny Antommara (2018) "Against Medical Advice Discharges: Pediatric Considerations." In *Against-Medical-Advice Discharges from the Hospital: Optimizing Prevention and Management to Promote High-Quality, Patient-Centered Care*. David Alfandre. New York, Springer: 143-157.
2. Armand H. Matheny Antommara (2016) "Conscientious Objection in Reproductive Medicine." In *The Oxford Handbook of Reproductive Ethics*. Leslie Francis. Oxford, Oxford University Press: 209-225.

3. Armand H. Matheny Antommara (2011) "Patient Participation in Medical Education." In *Clinical Ethics in Pediatrics: A Case-based Approach*. Douglas Diekema, Mark Mercurio, and Mary Beth Adam. Cambridge, Cambridge University Press: 221-225.
4. Armand H. Matheny Antommara (2011) "State Intervention in Parental Decision Making: *Gone Baby Gone*." In *The Picture of Health: Medical Ethics and the Movies*. Henri Colt, Silvia Quadrelli, and Lester Friedman. Oxford, Oxford University Press: 308-12.
5. Armand H. Matheny Antommara (2009) "Managing Conflicts of Interest: A Perspective from a Pediatrician." In *Professionalism in Medicine: The Case-Based Guide for Medical Students*. John Spandorfer, Charles Pohl, Thomas Nasca and Susan Lee Rattner. Cambridge, Cambridge University Press: 376-7.
6. Armand H. Matheny Antommara (2007) "Do-Not-Resuscitate Orders." In *Comprehensive Pediatric Hospital Medicine*. L. B. Zaoutis and V. W. Chiang. Philadelphia, Mosby Elsevier: 1200-4.

## **OTHER**

### **Policy Statements and Technical Reports**

1. American Academy of Pediatrics Committee on Bioethics. Armand H. Matheny Antommara Lead Author. (2013) "Conflicts between Religious or Spiritual Beliefs and Pediatric Care: Informed Refusal, Exemptions, and Public Funding." *Pediatrics*. 132: 962-965. PMID: 24167167.
2. American Academy of Pediatrics Committee on Bioethics. Armand H. Matheny Antommara Lead Author. (2013) "Ethical Controversies in Organ Donation After Circulatory Death." *Pediatrics*. 131: 1021-1026. PMID: 23629612.
3. American Academy of Pediatrics Committee on Bioethics and Committee on Genetics and the American College of Medical Genetics and Genomics Social, Ethical, and Legal Issues Committee (2013) "Policy Statement: Ethical and Policy Issues in Genetic Testing and Screening of Children." *Pediatrics*. 131: 620-622. PMID: 23428972.
4. Lainie Friedman Ross, Howard M. Saal, Karen L. David, Rebecca R. Anderson and the American Academy of Pediatrics Committee on Bioethics and Committee on Genetics and the American College of Medical Genetics and Genomics Social, Ethical, and Legal Issues Committee (2013) "Technical Report: Ethical and Policy Issues in Genetic Testing and Screening of Children." *Genetics in Medicine*. 15: 234-245. PMID: 23429433.
5. American Academy of Pediatrics Committee for Pediatric Research and Committee on Bioethics (2012) "Human Embryonic Stem Cell (hESC) and Human Embryo Research." *Pediatrics* 130: 972-977. PMID: 23109685.
6. American College of Obstetricians and Gynecologists, Committee on Ethics and American Academy of Pediatrics, Committee on Bioethics (2011) "Maternal-Fetal Intervention and Fetal Care Centers," *Pediatrics* 128; e473-e478. PMID: 21788223.
7. American Academy of Pediatrics Committee on Pediatric Emergency Medicine and Committee on Bioethics (2011) "Consent for Emergency Medical Services for Children and Adolescents." *Pediatrics* 128: 427-433. PMID: 21788221.
8. Council on School Health and Committee on Bioethics. Robert Murray and Armand H. Matheny Antommara Lead Authors. (2010) "Honoring –Do-Not-Attempt Resuscitation Requests in Schools." *Pediatrics* 125; 1073-1077. PMID: 20421255.
9. Committee on Bioethics (2010) "Ritual Genital Cutting of Female Minors." *Pediatrics* 125; 1088-1093. PMID: 20421257.

10. Committee on Bioethics. (2010) "Children as Hematopoietic Stem Cell Donors," *Pediatrics* 125; 392-40. PMID: 20100753.
11. Committee on Bioethics. Armand H. Matheny Antommara Lead Author. (2009) "Physician Refusal to Provide Information or Treatment Based on Claims of Conscience." *Pediatrics*. 124; 1689-93. PMID: 19948636.
12. Committee on Bioethics (2009) "Pediatrician-Family-Patient Relationships: Managing the Boundaries." *Pediatrics* 124; 1685-8. PMID: 19948635.
13. Douglas S. Diekema, Jeffrey R. Botkin, and Committee on Bioethics (2009) "Forgoing Medically Provided Nutrition and Hydration in Children." *Pediatrics* 124; 813-22. PMID: 19651596.
14. Lainie Friedman Ross, J. Richard Thistlethwaite, Jr., and the Committee on Bioethics (2008) "Minors as Living Solid-Organ Donors." *Pediatrics* 122: 454-61. PMID: 18676567.
15. Mary E. Fallat, John Hutter, and Section on Hematology Oncology and Section on Surgery the Committee on Bioethics (2008) "Preservation of Fertility in Pediatric and Adolescent Patients with Cancer." *Pediatrics* 121: 1461-9. PMID: 18450888.
16. Marcia Levetown and Bioethics and the Committee on Bioethics (2008) "Communicating With Children and Families: From Everyday Interactions to Skill in Conveying Distressing Information." *Pediatrics* 121: 1441-60. PMID: 18450887.
17. American Academy of Pediatrics. Committee on Bioethics (2007) "Professionalism in Pediatrics: Statement of Principles." *Pediatrics* 120:895-7. PMID: 17908776.

### **Ethics Rounds**

1. Imogen Clover-Brown, Bryanna More, Christina G. Andrews, and Armand H. Matheny Antommara. (2023) "Ethical Issues With Patient-Provider Interactions in an Evolving Social Media Landscape." *Pediatrics*. 151: e2022060066. PMID: 3765789.
2. Maeghann S. Weaver, Marianne E. M. Yee, Courtney E. Lawrence, Armand H. Matheny Antommara, and Ross M. Fasano. (2023) "Requests for Directed Blood Donations." *Pediatrics*. 151: e2022058183. PMID: 36897227.
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7. Jennifer E. deSante-Bertkau, Timothy K. Knilans, Govind Persad, Patricia J. Zettler, Holly Fernandez Lynch, and Armand H. Matheny Antommara. (2021) "Off-Label Prescription of COVID-19 Vaccines in Children: Clinical, Ethical, and Legal Issues." *Pediatrics*. 149: e2021054578. PMID: 34615694.

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9. Elizabeth Lanphier, Luke Mosley, and Armand H. Matheny Antommara. (2021) "Assessing Visitor Policy Exemption Requests During the COVID-19 Pandemic." *Pediatrics*. 148: e2021051254. PMID: 33990461.
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### Continuing Medical Education

1. Armand H. Matheny Antommara (2014) Authored 4 questions. NEJM Knowledge+ Family Medicine Board Review. NEJM Group.
2. Armand H. Matheny Antommara (2009) "Hot Topics: Ethics and Donation After Cardiac Death [online course]. PediaLink. American Academy of Pediatrics. October 24. <http://ethics.ht.courses.aap.org/>. Accessed December 14. 2009.

### Editorials

1. Armand H. Matheny Antommara, Chris Feudtner, Mary Beth Benner, and Felicia Cohn on Behalf of the Healthcare Ethics Consultant-Certified Certification Commission (2020) "The Healthcare Ethics Consultant-Certified Program: Fair, Feasible, and Defensible, But Neither Definite Nor Finished," *American Journal of Bioethics* 20:1-5. PMID: 32105202.
2. Armand H. Matheny Antommara and Pamela W. Popp (2020) "The Potential Roles of Surrogacy Ladders, Standby Guardians, and Medicolegal Partnerships, in Surrogate Decision Making for Parents of Minor Children," *Journal of Pediatrics* 220:11-13. PMID 31952849.

### Commentaries

1. Jerry Schwartz, Dawn Nebrig, Laura Monhollen, and Armand H. Matheny Antommara. (2023) "Transforming Behavior Contracts into Collaborative Commitments with Families." *American Journal of Bioethics*. 23(1): 73-75. PMID: 36594997.
2. Armand H. Matheny Antommara and Elizabeth Lanphier. (2022) "Supporting Marginalized Decision-Maker's Autonom(ies)." *American Journal of Bioethics*. 22(6):22-24. PMID: 35616965.
3. Mary V. Greiner and Armand H. Matheny Antommara. (2022) "Enrolling Foster Youth in Clinical Trials: Avoiding the Harm of Exclusion." *American Journal of Bioethics*. 22(4):85-86. PMID: 35420526. Reprinted in (2024) *Challenging Cases in Clinical Research Ethics*. Benjamin S. Wilfond, Liza-Marie Johnson, Devan M. Duenas, and Holly A. Taylor. Boca Raton, FL, CRC Press: 166-167.

4. William Sveen and Armand H. Matheny Antommara. (2020) "Why Healthcare Workers Should Not Be Prioritized in Ventilator Triage." *American Journal of Bioethics*. 20(7): 133-135. PMID: 32716811.
5. Armand H. Matheny Antommara, William Sveen, and Erika L. Stalets (2020) "Informed Consent Should Not Be Required for Apnea Testing and Arguing It Should Misses the Point," *American Journal of Bioethics*. 20: 25-27. PMID: 32441602.
6. Armand H. Matheny Antommara (2019) "Relational Potential versus the Parent-Child Relationship," *Hastings Center Report*. 49(3): 26-27. PMID: 31269255.
7. Armand H. Matheny Antommara, Robert A. Shapiro, and Lee Ann E. Conard (2019) "Psychological Maltreatment and Medical Neglect of Transgender Adolescents: The Need for Recognition and Individualized Assessment." *American Journal of Bioethics*. 19: 72-74. PMID: 31543011.
8. Armand H. Matheny Antommara (2018) "Accepting Things at Face Value: Insurance Coverage for Transgender Healthcare." *American Journal of Bioethics*. 18: 21-23. PMID: 31159689.
9. Armand H. Matheny Antommara and Judith R. Ragsdale (2018) "Shaken, not Stirred: What are Ethicists Licensed to Do?" *American Journal of Bioethics* 18: 56-58. PMID: 29697345.
10. Armand H. Matheny Antommara (2017) "Issues of Fidelity and Trust Are Intrinsic to Uncontrolled Donation after Circulatory Determination of Death and Arise Again with Each New Resuscitation Method," *American Journal of Bioethics* 17: 20-22. PMID: 28430053.
11. Armand H. Matheny Antommara (2016) "Conscientious Objection: Widening the Temporal and Organizational Horizons," *The Journal of Clinical Ethics* 27: 248-250. PMID: 27658282.
12. Armand H. Matheny Antommara and Ron King. (2016) "Moral Hazard and Transparency in Pediatrics: A Different Problem Requiring a Different Solution." *American Journal of Bioethics* 16: 39-40. PMID: 27292846.
13. Armand H. Matheny Antommara and Richard F. Ittenabch (2016) "Quality Attestation's Portfolio Evaluation Is Feasible, But Is It Reliable and Valid?" *American Journal of Bioethics* 16: 35-38. PMID: 26913658.
14. Armand H. Matheny Antommara and Kristin Stanley Bramlage (2015) "Enrolling Research Participants in Private Practice: Conflicts of Interest, Consistency, Therapeutic Misconception, and Informed Consent." *AMA Journal of Ethics*. 17:1122-1126. PMID: 26698585.
15. Armand H. Matheny Antommara (2015) "Characterizing Clinical Ethics Consultations: The Need for a Standardized Typology of Cases." *American Journal of Bioethics* 15: 18-20. PMID: 25970383.
16. Armand H. Matheny Antommara (2015) "Intensified Conflict Instead of Closure: Clinical Ethics Consultants' Recommendations' Potential to Exacerbate Ethical Conflicts." *American Journal of Bioethics* 15: 52-4. PMID: 25562231.
17. Lainie Friedman Ross and Armand H. Matheny Antommara (2014) "The need to promote all pediatric stem cell donors' understanding and interests." *Pediatrics* 133: e1356-e1357. PMID: 24777208.
18. Armand H. Matheny Antommara (2014) "Pubertal Suppression and Professional Obligations: May a Pediatric Endocrinologist Refuse to Treat an Adolescent with Gender Dysphoria." *American Journal of Bioethics* 13: 43-46. PMID: 24422933.



19. Armand H. Matheny Antommara (2012) "Empowering, Teaching, and Occasionally Advocating: Clinical Ethics Consultants' Duties to All of the Participants in the Process." *American Journal of Bioethics* 12 11-3. PMID: 22852533.
20. Armand H. Matheny Antommara (2010) "Dying but not Killing: Donation after Cardiac Death Donors and the Recovery of Organs." *Journal of Clinical Ethics* 21: 229-31. PMID: 21089993.
21. Armand H. Matheny Antommara and Julie Melini (2010) "Is it Reasonable to Refuse to be Seen by a Nurse Practitioner in the Emergency Department?" *American Journal of Bioethics* 10: 15-17. PMID: 20694899.
22. William Meadow, Chris Feudtner, Armand H. Matheny Antommara, Dane Sommer, John Lantos (2010) "A Premature Baby with Necrotizing Enterocolitis Whose Parents Are Jehovah's Witnesses." *Pediatrics*. 216: 151-155. PMID: 20566607.
23. C. C. Weitzman, S. Schlegel, Nancy Murphy, Armand H. Matheny Antommara, J. P. Brosco, Martin T. Stein (2009) "When Clinicians and a Parent Disagree on the Extent of Medical Care." *Journal of Developmental and Behavioral Pediatrics*. 30: 242-3. PMID: 19525718. Reprinted as (2010) *Journal of Developmental and Behavioral Pediatrics*. 31: S92-5. PMID: 20414087
24. Armand H. Matheny Antommara and Susan Bratton (2008) "Nurses' Attitudes toward Donation after Cardiac Death: Implications for Nurses' Roles and Moral Distress." *Pediatric Critical Care Medicine*, 9: 339-40. PMID: 18446100.
25. Armand H. Matheny Antommara and Nannette C. Dudley (2007) "Should Families Be Present During CPR?" *AAP Grand Rounds*, 17: 4-5.
26. Armand H. Matheny Antommara (2006) "The Proper Scope of Analysis of Conscientious Objection in Healthcare: Individual Rights or Professional Obligations" *Teaching Ethics*, 7: 127-31.
27. Armand H. Matheny Antommara and Rajendu Srivastava (2006) "If Cardiologists Take Care of Patients with Heart Disease, What do Hospitalists Treat?: Hospitalists and the Doctor-Patient Relationship." *American Journal of Bioethics*, 6: 47-9. PMID: 16423793.
28. Armand H. Matheny Antommara (2003) "I Paid Out-of-Pocket for My Son's Circumcision at Happy Valley Tattoo and Piercing: Alternative Framings of the Debate over Routine Neonatal Male Circumcision," *American Journal of Bioethics* 3: 51-3. PMID: 12859817.

## Letters

1. Benjamin S. Wilfond, David Magnus, Armand H Matheny Antommara, Paul Appelbaum, Judy Aschner, Keith J. Barrington, Tom Beauchamp, Renee D. Boss, Wylie Burke, Arthur L. Caplan, Alexander M. Capron, Mildred Cho, Ellen Wright Clayton, F. Sessions Cole, Brian A. Darlow, Douglas Diekema, Ruth R. Faden, Chris Feudtner, Joseph J. Fins, Norman C. Fost, Joel Frader, D. Micah Hester, Annie Janvier, Steven Joffe, Jeffrey Kahn, Nancy E. Kass, Eric Kodish, John D. Lantos, Laurence McCullough, Ross McKinney, Jr., William Meadow, P. Pearl O'Rourke, Kathleen E. Powderly, DeWayne M. Pursley, Lainie Friedman Ross, Sadath Sayeed, Richard R. Sharp, Jeremy Sugarman, William O. Tarnow-Mordi, Holly Taylor, Tom Tomlison, Robert D. Truog, Yoram T. Unguru, Kathryn L. Weise, David Woodrum, Stuart Youngner (2013) "The OHRP and SUPPORT," *New England Journal of Medicine*, 368: e36. PMID: 23738513.

2. Lainie Friedman Ross and Armand H. Matheny Antommara (2011) "In Further Defense of the American Academy of Pediatrics Committee on Bioethics 'Children as Hematopoietic Stem Cell Donors' Statement." *Pediatric Blood & Cancer*. 57: 1088-9.
3. Armand H. Matheny Antommara (2011) "Growth Attenuation: Health Outcomes and Social Services." *Hastings Center Report*, 41(5): 4. PMID: 21980886.
4. Susan Bratton and Armand H. Matheny Antommara (2010) "Dead Donor Rule and Organ Procurement: The Authors Reply." *Pediatric Critical Care Medicine*, 11: 314-5.
5. Armand H. Matheny Antommara and Joel Frader (2009) "Policies of Children's Hospitals on Donation After Cardiac Death—Reply." *Journal of the American Medical Association*, 302: 845.

### Case Reports

Armand H. Matheny Antommara (2002) "Case 4.9: Inappropriate Access to a Celebrity's Medical Records." In *Ethics and Information Technology: A Case-Based Approach to a Health Care System in Transition*, James G. Anderson and Kenneth W. Goodman, 79-80. New York: Springer-Verlag.

### Book Reviews

1. Armand H. Matheny Antommara (2024) Review of *Mormonism, Medicine, and Bioethics*, by Courtney S. Campbell. *Mormon Studies Review* 11: 182-8.
2. Armand H. Matheny Antommara (2023) "An Ambitious Goal: A Grounded, Informed, and Compelling Theological Bioethics." Review of *Disability's Challenge to Theology: Genes, Eugenics, and the Metaphysics of Modern Medicine* by Devan Stahl. *Hastings Center Report* 53(2): 44-45.
3. Armand H. Matheny Antommara (2021) Review of *When Harry Became Sally: Responding to the Transgender Moment*, by Ryan T. Anderson. *Journal of Medical Humanities* 42: 195-9. PMID 31808021.
4. Armand H. Matheny Antommara (2012) Review of *The Ethics of Organ Transplantation*, by Steven J. Jensen, ed., *Journal of the American Medical Association* 308: 1482-3.
5. Armand H. Matheny Antommara (2012) Review of *The Soul of Medicine: Spiritual Perspectives and Clinical Practice*, by John R. Peteet and Michael N. D'Ambra, ed., *Journal of the American Medical Association* 308: 87.
6. Armand H. Matheny Antommara (2009) Review of *Conflicts of Conscience in Health Care: An Institutional Compromise*, by Holly Fernandez Lynch. *American Journal of Bioethics* 9: 63-4.
7. Armand H. Matheny Antommara (2008) Review of *A Practical Guide to Clinical Ethics Consulting: Expertise, Ethos, and Power*, by Christopher Meyers. *American Journal of Bioethics* 8: 72-3.
8. Armand H. Matheny Antommara (2004) Review of *Children, Ethics, and Modern Medicine*, by Richard B. Miller. *American Journal of Bioethics* 4: 127-8.
9. Armand H. Matheny Antommara (2002) Review of *Ward Ethics: Dilemmas for Medical Students and Doctors in Training*, by Thomasine Kushner and David Thomasma, ed. *American Journal of Bioethics* 2: 70-1. PMID: 22494193.
10. Armand H. Matheny Antommara (1999) Review of *Human Cloning: Religious Responses*, by Ronald Cole-Turner, ed. *Prism* 6 (March/April): 21.

11. Armand H. Matheny Antommara (1999) Review of *Christian Theology and Medical Ethics: Four Contemporary Approaches*, by James B. Tubbs, Jr. *Journal of Religion* 79 (April): 333-5.
12. Armand H. Matheny Antommara (1997) Review of *Body, Soul, and Bioethics*, by Gilbert C. Meilaender. *Prism* 4 (May/June): 28.

### **Newspaper Articles**

1. W. Bradley Poss and Armand H. Matheny Antommara (2010) "Mass casualty planning must incorporate needs of children." *AAP News* 31 (July): 38.
2. Robert Murray and Armand H. Matheny Antommara (2010) "Pediatricians should work with school nurses to develop action plans for children with DNAR orders." *AAP News* 31 (May): 30..
3. Armand H. Matheny Antommara (2009) "Addressing physicians' conscientious objections in health care." *AAP News* 30 (December): 32.

### **UNPUBLISHED POSTER PRESENTATIONS**

1. Armand H. Matheny Antommara. (2018) "Ethical Issues in the Care of International Patients: A Case Study." International Conference on Clinical Ethics and Consultation, Oxford, United Kingdom.
2. Jill S Sweney, Brad Poss, Colin Grissom, Brent Wallace, and Armand H Matheny Antommara, (2010) "Development of a Statewide Pediatric Pandemic Triage Plan in Utah." Pediatric Academic Societies Annual Meeting, Vancouver, Canada. E-PAS20103713.147.
3. Christopher G. Maloney, Armand H. Matheny Antommara, James F. Bale, Thomas Greene, Jian Ying, Gena Fletcher, and Rajendu Srivastava (2010) "Why Do Pediatric Interns Violate the 30 Hour Work Rule?" Pediatric Academic Societies Annual Meeting, Vancouver, Canada. E-PAS20101500.596
4. Armand H. Matheny Antommara and Edward B. Clark (2007) "Resolving Conflict through Bioethics Mediation." 3<sup>rd</sup> International Conference on Ethics Consultation and Clinical Ethics, Toronto, Canada.
5. Elizabeth Tyson, Tracy Hill, Armand Antommara, Gena Fletcher, and Flory Nkoy (2007) "Physician Practice Patterns Regarding Nasogastric Feeding Supplementation and Intravenous Fluids in Bronchiolitis Patients." Pediatrics Academic Societies Annual Meeting, Toronto, Canada. E-PAS2007:61300.

### **ORAL PRESENTATIONS**

#### **Keynote/Plenary Lectures**

##### **International**

1. 2021, *Panelist*, Partnership for Quality Medical Donations, Charitable Access Programming for Rare Diseases, "Ethical Issues," Webinar, April 6.
2. 2017, *Invited Speaker*, Spina Bifida Fetoscopic Repair Study Group and Consortium, "Ethics of Innovation and Research in Fetal Surgery," Cincinnati, Ohio, October 26.
3. 2014, *Invited Speaker*, CIC 2013 CCI: Canadian Immunization Conference, "Condition-of-Service Influenza Prevention in Health Care Settings," Ottawa, Canada, December 2.
4. 2014, *Invited Speaker*, National Conference of the Chinese Pediatric Society, "A Brief Introduction to Pediatric Research and Clinical Ethics," Chongqing, China, September 12.

## National

1. 2020, *Panelist*, Children's Mercy Bioethics Center, "Ethical Issues in the COVID Pandemic at Children's Hospitals," Webinar, March 2.
2. 2019, *Invited Speaker*, North American Fetal Therapy Network (NAFTnet), "Ethics of Innovation," Chicago, Illinois, October 12.
3. 2019, *Panelist*, National Society of Genetic Counselors Prenatal Special Interest Group, "Fetal Intervention Ethics," Webinar, September 12.
4. 2017, *Invited Participant*, American College of Epidemiology Annual Meeting, Preconference Workshop, "Extreme Personal Exposure Biomarker Levels: Guidance for Study Investigators," New Orleans, Louisiana, September 24.
5. 2016, *Invited Speaker*, American Academy of Pediatrics National Conference & Exhibition, Joint Program: Section on Hospital Medicine and Section on Bioethics, "Resource Allocation: Do We Spend Money to Save One Patient with Ebola or Over a 1,000?" San Francisco, California, October 23.
6. 2016, *Invited Speaker*, 26<sup>th</sup> Annual Specialist Education in Extracorporeal Membrane Oxygenation (SEECHMO) Conference, "Ethical Issues in ECMO: The Bridge to Nowhere," Cincinnati, Ohio, June 5.
7. 2015, *Invited Speaker*, Extracorporeal Life Support Organization (ELSO) 26<sup>th</sup> Annual Conference, "ECMO-Supported Donation after Circulatory Death: An Ethical Analysis," Atlanta, Georgia, September 20.
8. 2014, *Invited Speaker*, Pediatric Evidence-Based Practice 2014 Conference: Evidence Implementation for Changing Models of Pediatric Health Care, "Ethical Issues in Evidence-Based Practice," Cincinnati, Ohio, September 19.
9. 2014, *Invited Speaker*, 6<sup>th</sup> Annual David Kline Symposium on Public Philosophy: Exploring the Synergy Between Pediatric Bioethics and Child Rights, "Does Predictive Genetic Testing for Adult Onset Conditions that Are Not Medically Actionable in Childhood Violate Children's Rights?" Jacksonville, Florida, March 6.
10. 2010, *Invited Speaker*, Quest for Research Excellence: The Intersection of Standards, Culture and Ethics in Childhood Obesity, "Research Integrity and Religious Issues in Childhood Obesity Research," Denver, Colorado, April 21.
11. 2010, *Invited Speaker*, Symposium on the Future of Rights of Conscience in Health Care: Legal and Ethical Perspectives, J. Reuben Clark Law School at Brigham Young University and the Ave Maria School of Law, "Conscientious Objection in Clinical Practice: Disclosure, Consent, Referral, and Emergency Treatment," Provo, Utah, February 26.
12. 2009, *Invited Speaker*, Pediatric Organ Donation Summit, "Research Findings Regarding Variations in Pediatric Hospital Donation after Cardiac Death Policies," Chicago, Illinois, August 18.
13. 2008, *Meet-the-Experts*, American Academy of Pediatrics National Conference & Exhibition, "Physician Refusal to Provide Treatment: What are the ethical issues?" Boston, Massachusetts, October 11.
14. 2008, *Invited Conference Faulty*, Conscience and Clinical Practice: Medical Ethics in the Face of Moral Controversy, The MacLean Center for Clinical Medical Ethics at the University of Chicago, "Defending Positions or Identifying Interests: The Uses of Ethical Argumentation in the Debate over Conscience in Clinical Practice," Chicago, IL, March 18.

15. 2007, *Symposium Speaker*, Alternative Dispute Resolution Strategies in End-of-Life Decisions, The Ohio State University Mortiz College of Law, “The Representation of Children in Disputes at the End-of-Life,” Columbus, Ohio, January 18.
16. 2005, *Keynote Speaker*, Decisions and Families, *Journal of Law and Family Studies* and The University of Utah S.J. Quinney College of Law, “Jehovah’s Witnesses, Roman Catholicism, and Calvinism: Religion and State Intervention in Parental, Medical Decision-Making,” Salt Lake City, Utah, September 23.

#### Regional/Local

1. 2024, *Case Expert Commentator*, Center for Bioethics Clinical Ethics Consortium, Harvard Medical School, “Can he be his mother’s keeper?”, Boston, Massachusetts, February 2.
2. 2023, *Speaker*, Yale Ethics Program, Yale School of Medicine, “Gender-Affirming Care,” New Haven, Connecticut, March 8.
3. 2021, *Panelist*, Pediatric Residency Noon Conference, University of Tennessee Health Science Center, “Bioethics Rounds—Ethical Issues in the Care of Transgender Adolescents,” Memphis, Tennessee, September 21.
4. 2020, *Keynote Speaker*, 53<sup>rd</sup> Annual Clinical Advances in Pediatrics, “Referral to a Fetal Care Center: How You Can Help Patients’ Mothers Address the Ethical Issues,” Kansas City, Kansas, September 16.
5. 2019, *Speaker*, Patient and Family Support Services, Primary Children’s Hospital, “Ethical Issues in the Care of Trans Adolescents,” Salt Lake City, Utah, December 5.
6. 2019, *Speaker*, Evening Ethics, Program in Medical Ethics and Humanities, University of Utah School of Medicine, “Patients, Parents, and Professionals: Ethical Issues in the Treatment of Trans Adolescents,” Salt Lake City, Utah, December 4.
7. 2019, *Speaker*, Pediatric Hospital Medicine Board Review Course, “Ethics, Legal Issues, and Human Rights including Ethics in Research,” Cincinnati, Ohio, September 8.
8. 2019, *Speaker*, Advances in Fetology, “Evolving Attitudes Toward the Treatment of Children with Trisomies,” Cincinnati, Ohio, September 6.
9. 2019, *Speaker*, Half-Day Ethics Training: Ethics Consultation & Ethics Committees, “Navigating the Rapids of Clinical Ethics Consultation: Intake, Recommendations, and Documentation,” Salt Lake City, Utah, June 1.
10. 2019, *Speaker*, Scientific and Ethical Underpinnings of Gene Transfer/Therapy in Vulnerable Populations: Considerations Supporting Novel Treatments, BioNJ, “What Next? An Ethical analysis of Prioritizing Conditions and Populations for Developing Novel Therapies,” Cranbury, New Jersey, March 7.
11. 2018, *Panelist*, Perivability, 17<sup>th</sup> Annual Regional Perinatal Summit, Cincinnati, Ohio, October 12.
12. 2018, *Speaker*, Regional Advance Practice Registered Nurse (APRN) Conference, “Adults are Not Large Children: Ethical Issues in Caring for Adults in Children’s Hospitals,” Cincinnati, Ohio, April 26.
13. 2018, *Speaker*, Southern Ohio/Northern Kentucky Sigma Theta Tau International Annual Conference, “Between Hope and Hype: Ethical Issues in Precision Medicine,” Sharonville, Ohio, March 2.
14. 2017, *Speaker*, Advances in Fetology 2017, “Ethics of Innovation and Research: Special Considerations in Fetal Therapy Centers,” Cincinnati, Ohio, October 27.

15. 2016, *Speaker*, End-of-Life Pediatric Palliative Care Regional Conference, “Ethical/Legal Issues in Pediatric Palliative Care,” Cincinnati, Ohio, September 15.
16. 2016, *Speaker*, 26<sup>th</sup> Annual Bioethics Network of Ohio (BENO) Conference, “When Does Parental Refusal of Medical Treatment for Religious Reasons Constitute Neglect?” Dublin, Ohio, May 29.
17. 2014, *Speaker*, Cincinnati Comprehensive Sickle Cell Center Symposium: Research Ethics of Hydroxyurea Therapy for Sickle Cell Disease During Pregnancy and Lactation, “Ethical Issues in Research with Pregnant and Lactating Women,” Cincinnati, Ohio, October 30.
18. 2014, *Speaker*, Advances in Fetology 2014, “The ‘Miracle Baby’ and Other Cases for Discussion,” Cincinnati, Ohio, September 26.
19. 2014, *Speaker*, Advances in Fetology 2014, “‘Can you tell me ...?’: Achieving Informed Consent Given the Prevalence of Low Health Literacy,” Cincinnati, Ohio, September 26.
20. 2014, *Panelist*, Center for Clinical & Translational Science & Training, Secrets of the Dead: The Ethics of Sharing their Data, Cincinnati, Ohio, August 28.
21. 2014, *Speaker*, Office for Human Research Protections Research Community Forum: Clinical Research ... and All That Regulatory Jazz, “Research Results and Incidental Findings: Do Investigators Have a Duty to Return Results to Participants,” Cincinnati, Ohio, May 21.
22. 2013, *Opening Presentation*, Empirical Bioethics: Emerging Trends for the 21<sup>st</sup> Century, University of Cincinnati Center for Clinical & Translational Science & Training, “Empirical vs. Normative Ethics: A Comparison of Methods,” Cincinnati, Ohio, February 21.
23. 2012, *Videoconference*, New York State Task Force on Life and the Law, “Pediatric Critical Care Triage,” New York, New York, March 1.
24. 2011, *Presenter*, Fall Faculty Development Workshop, College of Social Work, University of Utah, “Teaching Ethics to Students in the Professions,” Salt Lake City, Utah, November 14.
25. 2011, *Speaker*, 15<sup>th</sup> Annual Conference, Utah Chapter of the National Association of Pediatric Nurse Practitioners, “Ethical Issues in Pediatric Practice,” Salt Lake City, Utah, September 22.
26. 2011, *Speaker*, Code Silver! Active Shooter in the Hospital, Utah Hospitals & Health Systems Association, Salt Lake City, Utah, March 21.
27. 2009, *Speaker*, Medical Staff Leadership Conference, Intermountain Healthcare, “The Ethics of Leadership,” Park City, Utah, October 30.
28. 2008, *Speaker*, The Art and Medicine of Caring: Supporting Hope for Children and Families, Primary Children’s Medical Center, “Medically Provided Hydration and Nutrition: Ethical Considerations,” Salt Lake City, Utah, February 25.
29. 2005, *Speaker*, Utah NAPNAP (National Association of Pediatric Nurse Practitioners) Chapter Pharmacology and Pediatric Conference, “Immunization Update,” Salt Lake City, Utah, August 18.
30. 2005, *Keynote Speaker*, 17th Annual Conference, Utah Society for Social Work Leadership in Health Care, “Brain Death: Accommodation and Consultation,” Salt Lake City, March 18.
31. 2004, *Continuing Education Presentation*, Utah NAPNAP (National Association of Pediatric Nurse Practitioners), “Febrile Seizures,” Salt Lake City, Utah, April 22.
32. 2004, *Speaker*, Advocacy Workshop for Primary Care Providers, “Ethics of Advocacy,” Park City, Utah, April 3.

33. 2002, *Speaker*, 16<sup>th</sup> Annual Biologic Basis of Pediatric Practice Symposium, “Stem Cells: Religious Perspectives,” Deer Valley, Utah, September 14.

## **Meeting Presentations**

### International

1. 2024, *Panelist*, International Conference on Clinical Ethics and Consultation, “Clinical Ethicists as Expert Witnesses: A Workshop Based on the Experiences of Clinical Ethicists and Lawyers in Pediatrics,” Montreal, Canada, May 31.
2. 2023, *Speaker*, International Conference on Clinical Ethics and Consultation, “Addressing Ethical and Conceptual Issues in Gender-Affirming Medical Care Outside of the Hospital,” Rome, Italy, June 8.
3. 2018, *Speaker*, International Conference on Clinical Ethics and Consultation, “A Systematic Review of Typologies Used to Characterize Clinical Ethics Consultations,” Oxford, United Kingdom, June 21.

### National

1. 2024, Srinivasan Suresh, Sriram Ramgopal, Judith Dexheimer, and Armand H. Matheny Antommara. *Workshop Presenter*, Pediatric Academic Societies Annual Meeting, “ChatGPT for Pediatricians: You’ve Heard About It. Now Learn How to Use It!” Toronto, May 6.
2. 2023, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “Addressing Restrictions on Gender-Affirming Medical Care in New Spaces: State Houses and Courtrooms,” Baltimore, Maryland, October 13.
3. 2023, Kelsey S. Ryan, Rakhi Gupta Bassuray, Leela Sarathy, Sharon Ostfeld, Armand H. Matheny Antommara, Erin Rhol, Steven R. Leuthner, and Christy L. Cummings. *Workshop Presenter*, Pediatric Academic Societies Annual Meeting, “How Can Newborn Toxicology Testing be Equitable?” Washington, DC, April 30.
4. 2022, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “A Mixed Methods Analysis of Requests for Religious Exemptions to a COVID-19 Vaccine Requirement.” Portland, Oregon, October 27.
5. 2022, *Panelist*, American Society for Bioethics and Humanities Annual Meeting, Pediatric Ethics Affinity Group, “When Ethical Healthcare Is Prohibited By Law, How Do We Respond?” Portland, Oregon, October 27.
6. 2022, *Speaker*, APPD/PAS Fellow Core Curriculum Workshop, Pediatric Academic Societies Annual Meeting, “From Idea to Implementation: Navigating the Ethical Landscape of Pediatric Clinical Research,” Denver, Colorado, April 22.
7. 2021, *Panelist*, Pediatric Endocrine Society Annual Meeting, Difference of Sex Development Special Interest Group, Virtual Conference, April 29.
8. 2020, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “Is This Child Dead? Controversies Regarding the Neurological Criteria for Death,” Virtual Conference, October 17.
9. 2020, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “Contemporary Ethical Controversy in Fetal Therapy: Innovation, Research, Access, and Justice,” Virtual Conference, October 15.
10. 2020, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “K-12 Schools and Mandatory Public Health Programs During the COVID-19 Pandemic,” Virtual Conference, October 15.

11. 2019, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “Ethical Issues in Translating Gene Transfer Studies Involving Children with Neurodegenerative Disorders,” Pittsburgh, Pennsylvania, October 26.
12. 2019, *Moderator*, Pediatric Academic Societies Annual Meeting, Clinical Bioethics, Baltimore, Maryland, April 28.
13. 2018, *Presenter*, American Society for Bioethics and Humanities Annual Meeting, “Looking to the Past, Understanding the Present, and Imaging the Future of Bioethics and Medical Humanities’ Engagement with Transgender Health,” Anaheim, California, October 19.
14. 2018, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “Should Vaccination Be a Prerequisite for Solid Organ Transplantation?” Anaheim, California, October 18.
15. 2018, Lindsey Douglas, Armand H. Matheny Antommara, Derek Williams. *Workshop Presenter*, Pediatric Hospital Medicine Annual Meeting, “IRB Approved! Tips and Tricks to Smooth Sailing through the Institutional Review Board (IRB).” Atlanta, Georgia, July 20.
16. 2018, Alan Schroeder, Armand H. Matheny Antommara, Hannah Bassett, Kevin Chi, Shawn Ralston, Rebecca Blankenburg. *Workshop Speaker*, Pediatric Hospital Medicine Annual Meeting, “When You Don’t Agree with the Plan: Balancing Diplomacy, Value, and Moral Distress,” Atlanta, Georgia, July 20.
17. 2018, Alan Schroeder, Hannah Bassett, Rebecca Blankenburg, Kevin Chi, Shawn Ralston, Armand H. Matheny Antommara. *Workshop Speaker*, Pediatric Academic Societies Annual Meeting, “When You Don’t Agree with the Plan: Balancing Diplomacy, Value, and Moral Distress,” Toronto, Ontario, Canada, May 7.
18. 2017, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “Tensions in Informed Consent for Gender Affirming Hormone Therapy and Fertility Preservation in Transgender Adolescents,” Kansas City, Missouri, October 19.
19. Lindsey Douglas, Armand H. Matheny Antommara, and Derek Williams. 2017, *Workshop Leader*, PHM[Pediatric Hospital Medicine]2017, “IRB Approved! Tips and Tricks to Smooth Sailing through the Institutional Review Board (IRB) Process,” Nashville, Tennessee, July 21.
20. 2016, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “Ethical Challenges in the Care of International Patients: Organization, Justice, and Cultural Considerations,” Washington, DC, October 9.
21. 2015, *Coauthor*, The American Society of Human Genetics Annual Meeting, “Adolescents’ Opinions on Disclosure of Non-Actionable Secondary Findings in Whole Exome Sequencing,” Baltimore, Maryland, October 9.
22. 2012, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “A Public Health Ethics Analysis of the Mandatory Immunization of Healthcare Personnel: Minimizing Burdens and Increasing Fairness,” Washington, DC, October 21.
23. Armand H. Matheny Antommara, Valerie Gutmann Koch, Susie A. Han, Carrie S. Zoubul. 2012, *Moderator*, American Society for Bioethics and Humanities Annual Meeting, “Representing the Underrepresented in Allocating Scarce Resources in a Public Health Emergency: Ethical and Legal Considerations,” Washington, DC, October 21.
24. 2012, *Platform Presentation*, Pediatric Academic Societies Annual Meeting, “Qualitative Analysis of International Variation in Donation after Circulatory Death Policies and Rates,” Boston, Massachusetts, April 30. Publication 3150.4.



25. 2011, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “The Intersection of Policy, Medicine, and Ethics during a Public Health Disaster: Special Considerations for Children and Families,” Minneapolis, Minnesota, October 13.
26. Armand H. Matheny Antommaria and Joel Frader. 2010, *Workshop Leader*, Pediatric Academic Societies Annual Meeting, “Conscientious Objection in Health Care: Respecting Conscience and Providing Access,” Vancouver, British Columbia, Canada. May 1. Session 1710.
27. 2009, *Workshop Leader*, American Society for Bioethics and Humanities Annual Meeting, “Advanced Clinical Ethics Consultation Skills Workshop: Process and Interpersonal Skills,” Washington, DC, October 15.
28. 2009, *Platform Presentation*, Pediatric Academic Societies Annual Meeting, “Qualitative Analysis of Donation after Cardiac Death Policies at Children’s Hospitals,” Baltimore, Maryland, May 2. Publication 2120.6.
29. 2008, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, “Qualitative Analysis of Donation After Cardiac Death (DCD) Policies at Children’s Hospitals,” Cleveland, Ohio, October 26.
30. 2007, *Participant*, Hamline University School of Law Biennial Symposium on Advanced Issues in Dispute Resolution, “An Intentional Conversation About Conflict Resolution in Health Care,” Saint Paul, Minnesota, November 8-10.
31. 2007, *Speaker*, American Society of Bioethics and Humanities Annual Meeting, “Bioethics Consultation and Alternative Dispute Resolution: Opportunities for Collaboration,” Washington, DC, October 21.
32. 2007, *Speaker*, American Society of Bioethics and Humanities Annual Meeting, “DNAR Orders in Schools: Collaborations Beyond the Hospital,” Washington, DC, October 18.
33. Armand H. Matheny Antommaria and Jeannie DePaulis. 2007, *Speaker*, National Association of Children’s Hospitals and Related Institutions Annual Meeting, “Using Mediation to Address Conflict and Form Stronger Therapeutic Alliances,” San Antonio, Texas, October 9.
34. 2006, *Speaker*, American Society of Bioethics and Humanities Annual Meeting, “Bioethics Mediation: A Critique,” Denver, Colorado, October 28.
35. 2005, *Panelist*, American Society of Bioethics and Humanities Annual Meeting, “How I See This Case: ‘He Is Not His Brain,’” Washington, DC, October 20.
36. 2005, *Paper Presentation*, Pediatric Ethics: Setting an Agenda for the Future, The Cleveland Clinic, “‘He Is Not His Brain:’ Accommodating Objections to ‘Brain Death,’” Cleveland, Ohio, September 9.
37. 2004, *Speaker*, American Society for Bioethics and Humanities Spring Meeting, “Verification and Balance: Reporting Within the Constraints of Patient Confidentiality,” San Antonio, Texas, March 13.
38. 2002, *Panelist*, American Society for Bioethics and Humanities Annual Meeting, “‘Who Should Survive?:’ Mental Retardation and the History of Bioethics,” Baltimore, Maryland, October 24.

#### **Invited/Visiting Professor Presentations**

1. 2013, Visiting Professor, “How to Listen, Speak and Think Ethically: A Multidisciplinary Approach,” Norton Suburban Hospital and Kosair Children’s Hospital, Louisville, Kentucky, May 22.

2. 2010, Visiting Professor, Program in Bioethics and Humanities and Department of Pediatrics, “What to Do When Parents Want Everything Done: ‘Futility’ and Ethics Facilitation,” University of Iowa Carver College of Medicine, Iowa City, Iowa, September 10.

### **Grand Round Presentations**

1. 2023, Harvey and Bernice Jones Lecture in Pediatric Ethics, “Too Far or Not Far Enough? Assessing Possible Changes in Determining Death and Procuring Organs,” Arkansas Children’s Hospital, Little Rock, November 16.
2. 2019, David Green Lectureship, “Establishing Goals of Care and Ethically Limiting Treatment,” Primary Children’s Hospital, Salt Lake City, Utah, December 5.
3. 2018, “The Ethics of Medical Intervention for Transgender Youth,” El Rio Health, Tucson, Arizona, September 29.
4. 2018, Pediatrics, “Patient Selection, Justice, and Cultural Difference: Ethical Issues in the Care of International Patients,” Cleveland Clinic, Cleveland, Ohio, April 10.
5. 2018, Bioethics, “Reversibility, Fertility, and Conflict: Ethical Issues in the Care of Transgender and Gender Nonconforming Children and Adolescents,” Cleveland Clinic, Cleveland, Ohio, April 9.
6. 2017, Heart Institute, “‘Have you ever thought about what you would want—if god forbid—you became sicker?’: Talking with adult patients about advance directives,” Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, October 16.
7. 2017, Pediatrics, “Respectful, Effective Treatment of Jehovah’s Witnesses,” with Judith R. Ragsdale, PhD, MDiv and David Morales, MD, Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, March 14.
8. 2017, Pediatrics, “Ethical Dilemmas about Discharging Patients When There Are Disagreements Concerning Safety,” Seattle Children’s Hospital, Seattle, Washington, January 19.
9. 2015, Pediatrics, “‘Nonbeneficial’ Treatment: What must providers offer and what can they withhold?,” Greenville Health System, Greenville, South Carolina, May 10.
10. 2014, Advance Practice Providers, “Common Ethical Issues,” Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, August 13.
11. 2014, Respiratory Therapy, “Do-Not-Resuscitate (DNR) Orders,” Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, July 15.
12. 2013, Heart Institute, “No Not Months. Twenty-Two *Years*-Old: Transiting Patients to an Adult Model of Care,” Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, October 21.
13. 2013, Division of Neonatology, “This Premature Infant Has a *BRCA1* Mutation!?: Ethical Issues in Clinical Whole Exome Sequencing for Neonatologists,” Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, October 11.
14. 2013, Department of Pediatrics, “Adults are Not Large Children: Ethical Issues in Caring for Adults in Children’s Hospitals,” Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, February 26.
15. 2012, “Mandate or Moratorium?: Persisting Ethical Controversies in Donation after Circulatory Death,” Cedars-Sinai Medical Center, Los Angeles, California, May 16.
16. 2011, Division of Pediatric Neurology Friday Lecture Series, “Inducing or Treating ‘Seizures’ with Placebos: Is It Ever Ethical?,” University of Utah, Salt Lake City, Utah, October 7.

17. 2011, Department of Surgery, “DNR Orders in the OR and other Ethical Issues in Pediatric Surgery: Case Discussions,” Primary Children’s Medical Center, Salt Lake City, Utah, October 3.
18. 2009, Department of Pediatrics, “What to Do When Parents Want Everything Done: ‘Futility’ and Bioethical Mediation,” Primary Children’s Medical Center, Salt Lake City, Utah, September 17.
19. 2008, Division of Pulmonology and Critical Care, “Futility: May Clinicians Ever Unilaterally Withhold or Withdraw Medical Treatment?” Utah Valley Regional Medical Center, Provo, Utah, April 17.
20. 2007, Division of Otolaryngology-Head and Neck Surgery, “Advance Directives, Durable Powers of Attorney for Healthcare, and Do Not Attempt Resuscitation Orders: Oh My!,” University of Utah School of Medicine, Salt Lake City, Utah, June 20.

### **Outreach Presentations**

1. 2019, *Panelist*, Cincinnati Edition, WVXU, “The Ethics of Human Gene Editing,” Cincinnati, Ohio, June 13.
2. 2019, *Speaker*, Adult Forum, Indian Hill Church, “Medical Ethics,” Indian Hill, Ohio, March 24.
3. 2016, *Speaker*, Conversations in Bioethics: The Intersection of Biology, Technology, and Faith, Mt. Washington Presbyterian Church, “Genetic Testing,” Cincinnati, Ohio, October 12.
4. 2008, *Speaker*, Science in Society, Co-sponsored by KCPW and the City Library, “Death—Choices,” Salt Lake City, Utah, November 20.
5. 2003, *Panelist*, Utah Symposium in Science and Literature, “The Goodness Switch: What Happens to Ethics if Behavior is All in Our Brains?” Salt Lake City, Utah, October 10.
6. 2002, *Respondent*, H. Tristram Englehardt, Jr. “The Culture Wars in Bioethics,” Salt Lake Community College, Salt Lake City, Utah, March 29.

### **Podcasts**

1. 2021, “Ethics of COVID Vaccines in Kids,” PHM from Pittsburgh, August 12.
2. 2020, COVID Quandaries: Episode 1, “Is Getting Sick Just Part of the Job?” Hard Call, October 6.

**EXHIBIT B**

TABLE 1: Level (Quality) of Evidence and Class (Strength) of Recommendation<sup>1</sup> and in 2020 American Heart Association Guideline for Pediatric Basic and Advanced Life Support

|                                | Class 1<br>(Strong)<br>Benefit >>><br>Risk | Class 2a<br>(Moderate)<br>Benefit >><br>Risk | Class 2b<br>(Weak)<br>Benefit >=<br>Risk | Class 3<br>No Benefit<br>(Moderate)<br>Benefit =<br>Risk | Class 3<br>Harm<br>(Strong)<br>Risk ><br>Benefit | Total      |
|--------------------------------|--|--|--|--|--|------------|
| Level A                        | 1 (0.8%)                                   | 0 (0.0%)                                     | 0 (0.0%)                                 | 0 (0.0%)   | 0 (0.0%)   | 1 (0.8%)   |
| Level B-R<br>(Randomized)      | 1 (0.8%)                                   | 2 (1.5%)                                     | 0 (0.0%)                                 | 0 (0.0%)   | 0 (0.0%)   | 3 (2.3%)   |
| Level B-NR<br>(Nonrandomized)  | 5 (3.8%)                                   | 9 (6.9%)                                     | 3 (2.3%)                                 | 0 (0.0%)   | 2 (1.5%)   | 19 (14.6%) |
| Level C-LD<br>(Limited Data)   | 24 (18.5%)                                 | 22 (16.9%)                                   | 21 (16.2%)                               | 1(0.8%)  | 2 (1.5%)   | 70 (53.8%) |
| Level C-EO<br>(Expert Opinion) | 22 (16.9%)                                 | 9 (6.9%)                                     | 6 (4.6%)                                 | 0 (0.0%)   | 0 (0.0%)   | 37 (28.5%) |
| Total                          | 53 (40.8%)                                 | 42 (32.3%)                                   | 30 (23.1%)                               | 1 (0.8%)   | 4 (3.1%)   | 130 (100%) |

1. Level (Quality) of Evidence

Level A

- High-quality evidence from more than 1 [Randomized Controlled Trial (RCT)]
- Meta-analyses of high-quality RCTs
- One or more RCTs corroborated by high-quality registry studies

Level B-R (Randomized)

- Moderate-quality evidence from 1 or more RCTs
- Meta-analyses of moderate-quality RCTs

Level B-NR (Nonrandomized)

- Moderate-quality evidence from 1 or more well-designed, well-executed nonrandomized studies, observational studies, or registry studies
- Meta-analyses of such studies

Level C-LD (Limited Data)

- Randomized or nonrandomized observational or registry studies with limitations of design or execution
- Meta-analyses of such studies
- Psychological or mechanistic studies in human subjects

Level C-EO (Expert Opinion)

- Consensus of expert opinion based on clinical experience

Topjian AA, Raymond TT, Atkins D, et al. Part 4: Pediatric basic and advanced life support: 2020 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation*. 2020;142(16\_suppl\_2):S469-S523.

## EXHIBIT C

TABLE 2: Strength of Recommendation and Quality of Evidence in Recommendations Made by the Endocrine Society

| Strength of the Recommendation/<br>Quality of the Evidence <sup>1</sup> | Endocrine Treatment of<br>Gender-Dysphoric/Gender-<br>Incongruent Persons | Pediatric Obesity-<br>Assessment, Treatment, and<br>Prevention | Congenital Adrenal<br>Hyperplasia Due to Steroid<br>21-Hydroxylase Deficiency |
|---|---|--|---|
| Strong High   | 0 (0) <sup>2</sup>  | 0 (0)  | 0 (0)   |
| Strong Moderate   | 3 (11)  | 4 (13)   | 18 (33)   |
| Strong Low  | 5 (18)  | 6 (20)   | 13 (25)   |
| Strong Very Low   | 2 (7)   | 1 (3)  | 1 (2)   |
| Weak High   | 0 (0)   | 0 (0)  | 0 (0)   |
| Weak Moderate   | 0 (0)   | 0 (0)  | 2 (4)   |
| Weak Low  | 9 (32)  | 5 (17)   | 4 (7)   |
| Weak Very Low   | 3 (11)  | 12 (40)  | 7 (13)  |
| Ungraded Good<br>Practice<br>Statement <sup>3</sup>                     | 6 (21)  | 2 (7)  | 9 (17)  |
| Either Low or<br>Very Low   | 19 (68)   | 24 (80)  | 25 (46)   |
| Total   | 28  | 30   | 54  |

### <sup>1</sup> Quality of the Evidence

High: “Consistent evidence from well-performed RCTs [Randomized Controlled Trials] or exceptionally strong evidence from unbiased observational studies”

Moderate: “Evidence from RCTs with important limitations (inconsistent results, methodological flaws, indirect or imprecise evidence), or unusually strong evidence from unbiased observational studies”

Low: “Evidence for at least one critical outcomes from observational studies, from RCTs with serious flaws, or indirect evidence”

Very Low: “Evidence for at least one of the critical outcomes from unsystematic clinical observations or very indirect evidence”

See Swiglo BA, Murad MH, Schünemann HJ, et al. A case for clarity, consistency, and helpfulness: State-of-the-art clinical practice guidelines in endocrinology using the grading of recommendations, assessment, development, and evaluation system. *J Clin Endocrinol Metab*. 2008;93(3):666-73.

### <sup>2</sup> n (%)

<sup>3</sup>Ungraded Good Practice Statement: “Direct evidence for these statements was either unavailable or not systematically appraised and considered out of the scope of this guideline. The intention of these statements is to draw attention to these principles.” See Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2017;102(11):3869-3903.

Guidelines:

Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2017;102(11):3869-3903.

Styne DM, Arslanian SA, Connor EL, et al. Pediatric obesity-assessment, treatment, and prevention: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2017;102(3):709-757.

Speiser PW, Arlt W, Auchus RJ, et al. Congenital adrenal hyperplasia due to steroid 21-hydroxylase deficiency: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2018;103(11):4043-4088.